

# KV-1365

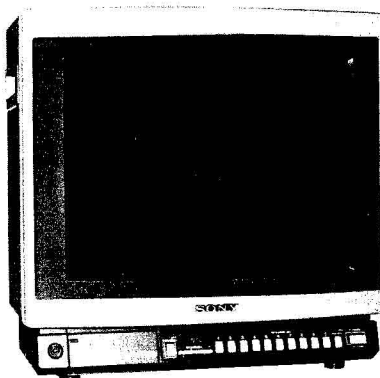
## SERVICE MANUAL

*US Model*

*Chassis No. SCC-548X-A*

*Canadian Model*

*Chassis No. SCC-552M-A*



# KV-1370D

## P3 CHASSIS

April, 1985

### SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF channels 2 - 13 UHF channels 14 - 69 Cable TV channels 1 - 99
Picture tube	Trinitron tube <b>13-inch picture tube measured diagonally</b> 90-degree deflection
Inputs VIDEO	1V p-p, 75 ohms unbalanced, sync negative
AUDIO	408 mV rms (100% modulation, 47 kilohms)
Power requirements	120 V AC, 60 Hz
Power consumption	91 W (max.)
Accessories supplied	Earphone (1) VHF/UHF telescopic dipole antenna AN-18 (1) Antenna connector (1)
Optional accessories	U/V mixer EAC-66 Connecting cables VMC-606M VMC-607M etc.

Design and specifications subject to change without notice.



TRINITRON® COLOR TV  
**SONY®**


**CTV**

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**WARNING !!**

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.


**SAFETY-RELATED COMPONENT WARNING !!**

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

**ATTENTION!!**

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

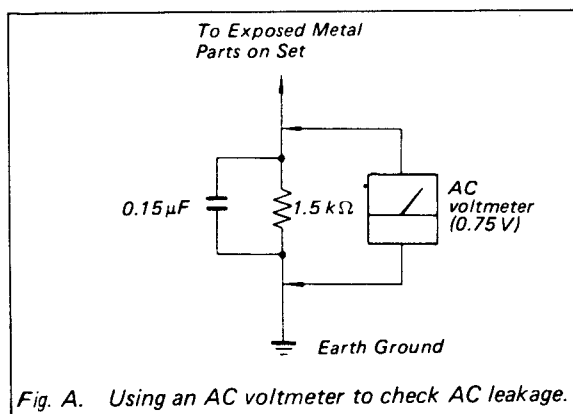
**ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!**

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

## SAFETY CHECK-OUT (US MODEL ONLY)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any).  
Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.



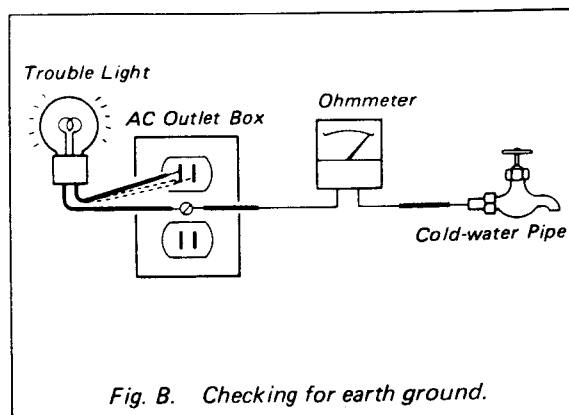
### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



## SECTION 1 GENERAL

### 1-1. TV OPERATION

For normal TV operation, follow the steps (1 through 5).

Connect. Earphone jack for private listening.

**1** Depress **POWER** to turn on.

**3** To view CATV programs, turn this selector to **ON**. For VHF/UHF programs, set it to **OFF**.

**2** Make sure that indication lamp in the display window is not lit.

If it is lit, press once the TV/VIDEO button.

**4** Select the desired channel in one of the following 2 ways.

Channel number indication  
When the set is turned on, the channel number "2" appears first.

Press the number(s) of the channel then press ENTER.

or

Press CH "+" for higher-numbered channels and "-" for lower-numbered channels.

**5** Adjust **VOLUME**.

To turn the set off, press **POWER** again.

### PICTURE ADJUSTMENTS

If any adjustment is necessary, adjust the appropriate control as described below.

**HUE**

skin tones become purplish    skin tones become greenish

**COLOR**

for less color intensity    for more color intensity

**BRIGHT**

for less brightness    for more brightness

**PICTURE**

to decrease picture contrast    to increase picture contrast

#### Cable TV channel chart \*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

Number on this TV										1	5	6	14	15	16	17
Corresponding CATV channel										A-8	A-7	A-6	A	B	C	D
18	19	20	21	22	23	24	25	26	27	28	29	30				
E	F	G	H	I	J	K	L	M	N	O	P	Q				
31	32	33	34	35	36	37	38	39							93	94
R	S	T	U	V	W	W+1	W+2	W+3							W+57	W+58
95	96	97	98	99												
A-5	A-4	A-3	A-2	A-1												

Check with your local cable TV company for more complete information on the available channels.

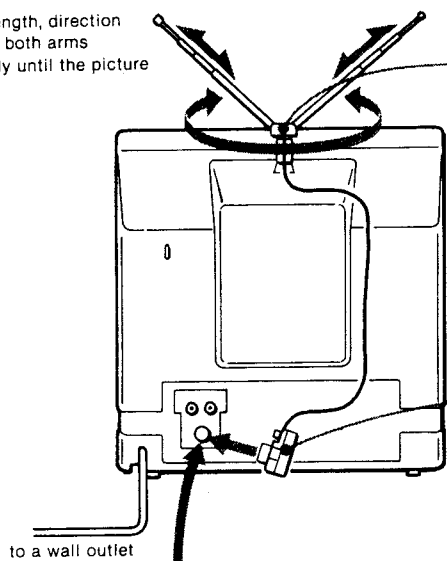
\* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

## 1-2. ANTENNA/CABLE CONNECTION

## INDOOR ANTENNA CONNECTION

For VHF/UHF reception, use the supplied dipole telescopic antenna.

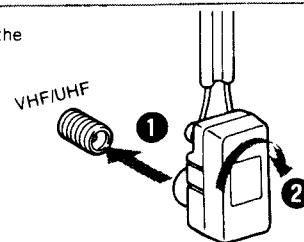
Adjust the length, direction and angle of both arms symmetrically until the picture is clear.



- 1** Insert the projection into the antenna receptacle on the set.

Align.

- 2** Plug the antenna connector into the VHF/UHF antenna terminal.



## OUTDOOR ANTENNA/CABLE CONNECTION

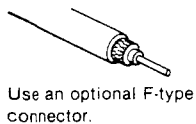
If you cannot obtain satisfactory reception with the dipole antenna, using an outdoor antenna may be necessary. Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

- 1** Remove the indoor antenna from the antenna terminal of the TV.
- 2** Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See A or B below.)

**A** Combination VHF/UHF antenna,\* VHF antenna, UHF antenna or CATV cable

Select the proper connector according to the cable type.

When the cable is a 75-ohm coaxial type (round)

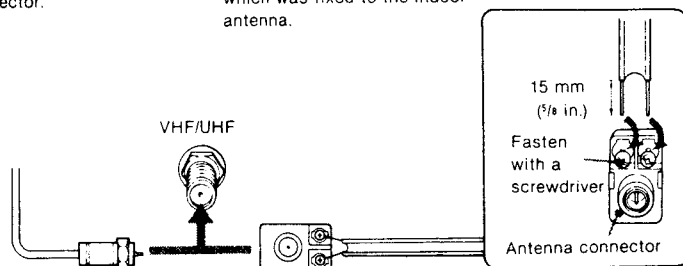


Use an optional F-type connector.

When the cable is a 300-ohm ribbon type lead-in (flat)



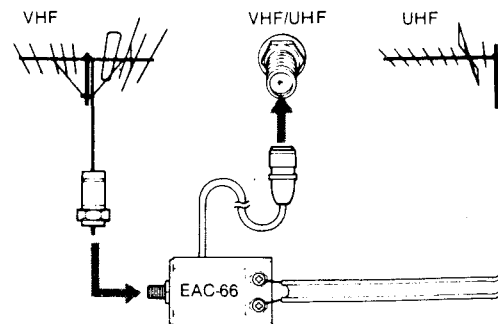
Attach the antenna connector which was fixed to the indoor antenna.



\* Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

**B** When both VHF and UHF antennas are connected

Prepare the VHF antenna end using the appropriate connector as illustrated in A. Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.



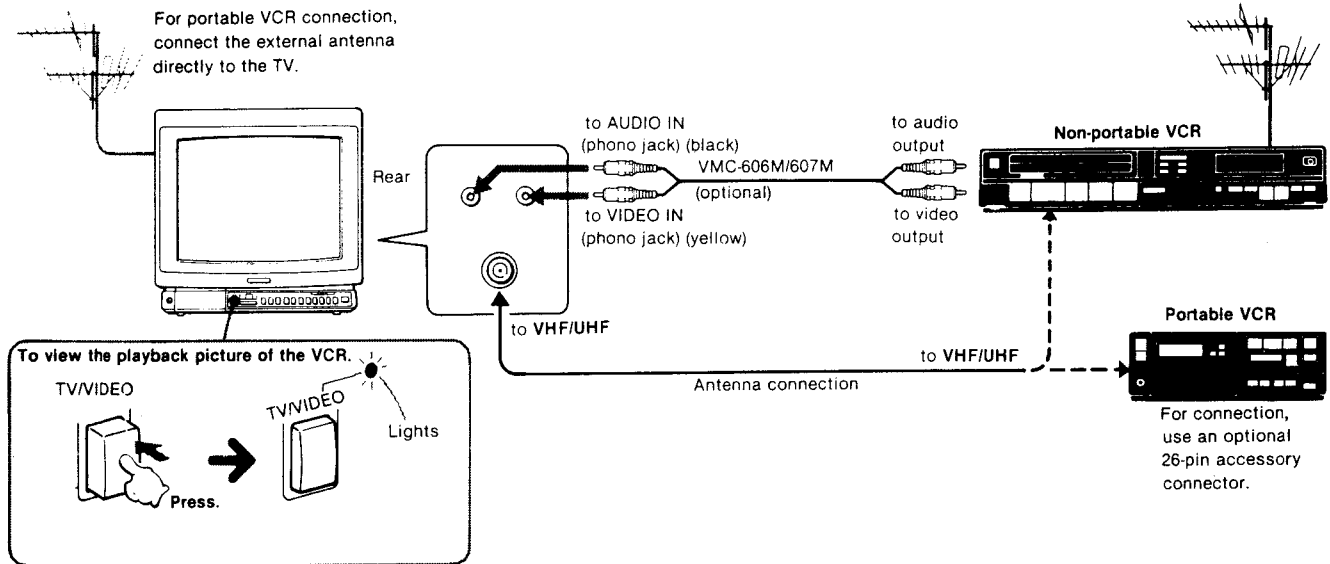
When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W + 1).

### 1-3. AUDIO AND VIDEO INPUT JACKS

You can view the picture generated by equipment connected to the AUDIO IN and VIDEO IN jacks by simply pressing the TV/VIDEO button.

We recommend using the AUDIO IN and VIDEO IN jacks to view VCR programs in better picture quality.

#### Connection of a VCR

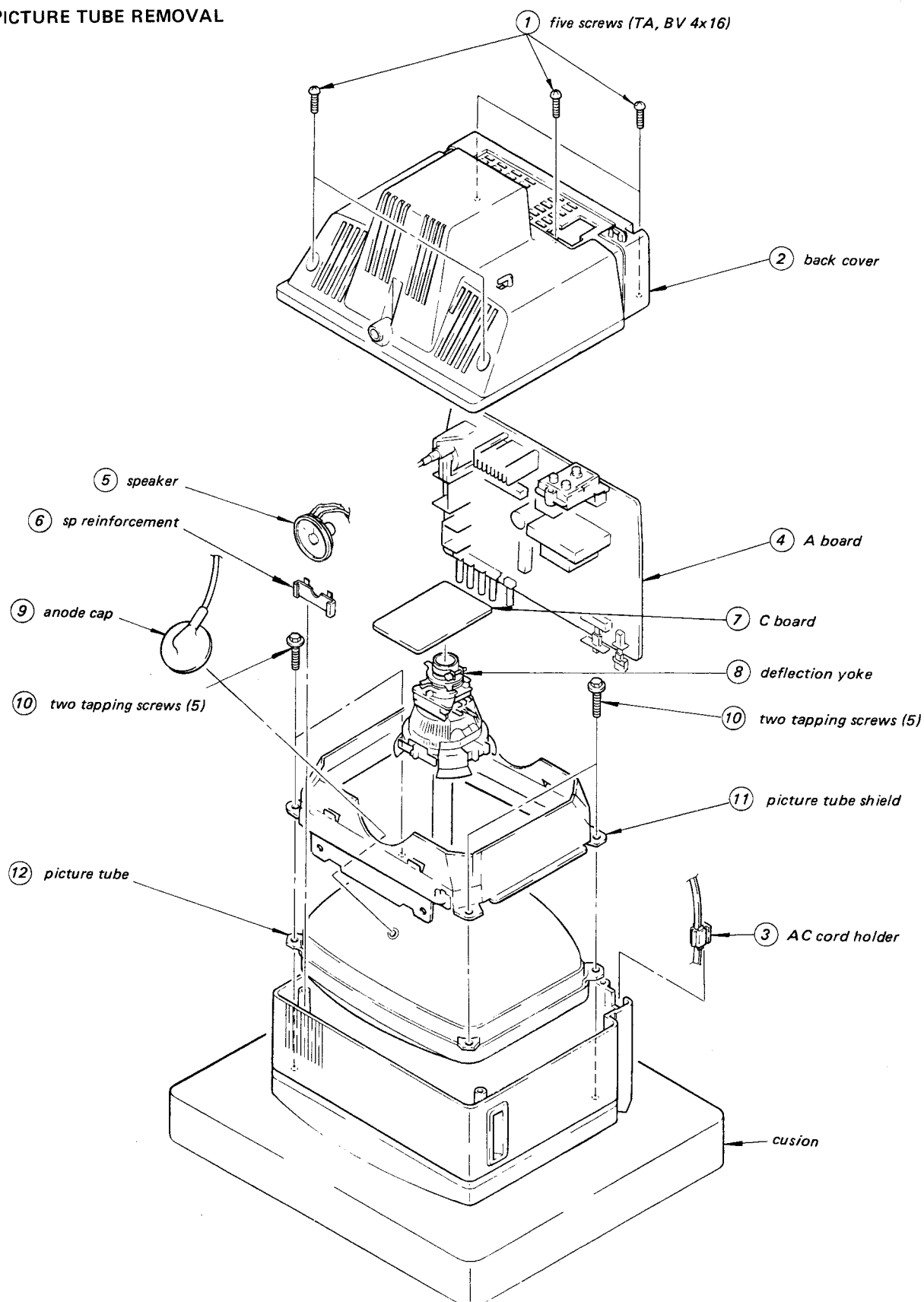


#### Notes on connections

- Before connecting, make sure that the power to each piece of equipment is turned off.
- For details on connections, refer to the instruction manuals of the equipment to be connected.
- The plugs should be fully inserted into the jacks. A loose connection may cause hum and noise.
- Match the colors of the plugs to that of the jacks.
- Move the VCR away from the TV if the display or sound is affected by the magnets in the TV.

## SECTION 2 DISASSEMBLY

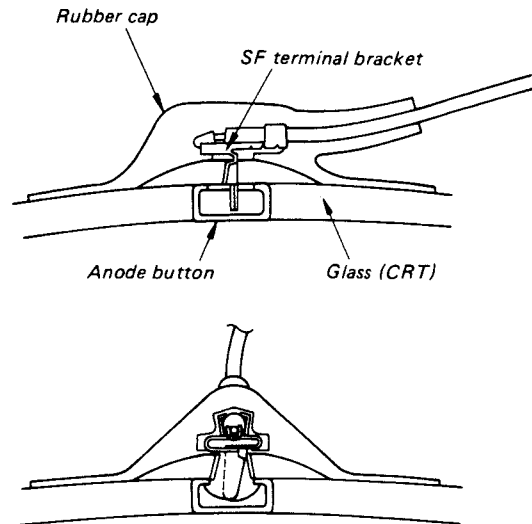
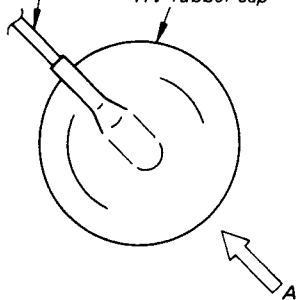
### 2-1. PICTURE TUBE REMOVAL



## 2-2. REMOVAL OF ANODE CAP

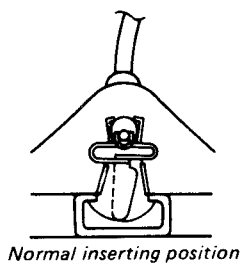
### • Anode Cap Structure

High-voltage polyethylene wire  
HV rubber cap

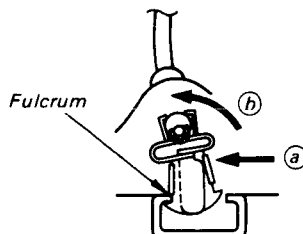


Cross section viewed from the arrow A

### • Removal of SF Terminal

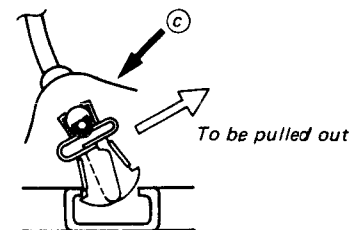


Normal inserting position



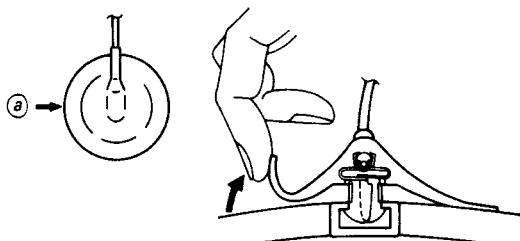
When pushing in the direction indicated by the arrow (a), the SF terminal tilts toward the fulcrum side due to the spring characteristic.

Remove it by pulling up in the direction indicated by the arrow (b) with the SF terminal tilted.

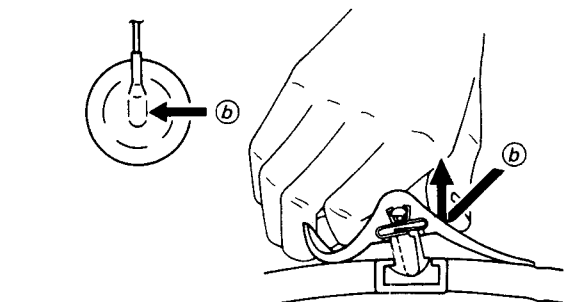
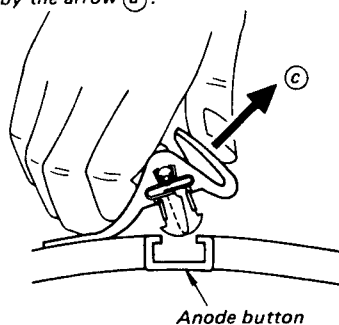


Tilt the SF terminal in the direction of the arrow (c) and pull out it in the direction (of 45°) indicated by the arrow.

### • Removing Procedures



① Turn up one side of the rubber cap in the direction indicated by the arrow (a).



② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow (b).

③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow (c).

## SECTION 3

### SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

● (picture) control ..... maximum

☼ (brightness) control ..... maximum  
(fully clockwise)

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser

#### 3-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

- 1 Turn on set power supply and receive an all-white signal.
- 2 Evenly degauss the entire screen.
- 3 Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 3-1.
- 4 Set BKG VR **R** to maximum and set **B** and **G** to minimum.
- 5 Move the deflection yoke back, and adjust the purity control so that **R** is in the center and **G** and **B** are at the sides, evenly. (Figure 3-2.)
- 6 Move the deflection yoke forward so that the entire screen is red.  
\* If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
- 7 Substitute **G**, then **B** for **R** in step 4 and check landing.
- 8 Rotate **R**, **G** and **B** once each and check landing.
- 9 When landing is not right, adjust the purity control and use magnets as shown in Figure 3-3, then repeat steps 7 and 8.
- 10 When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.

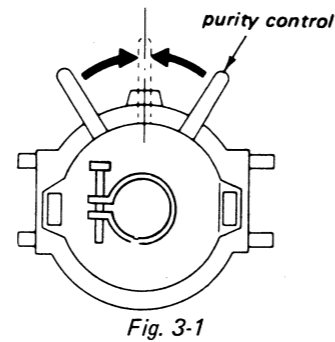


Fig. 3-1

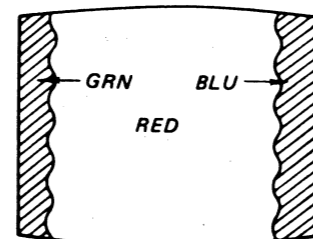


Fig. 3-2

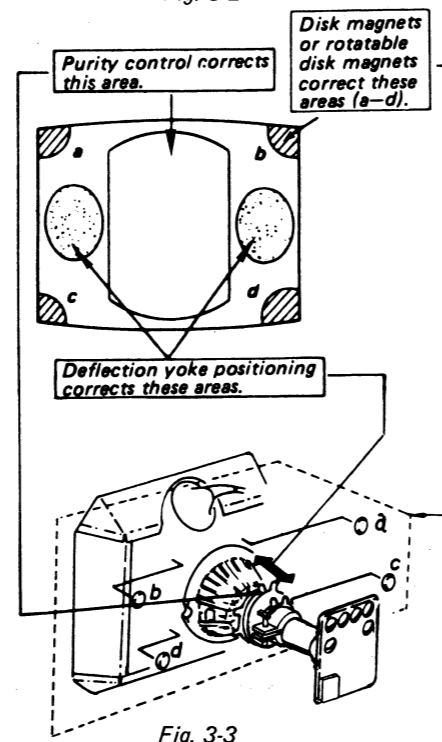
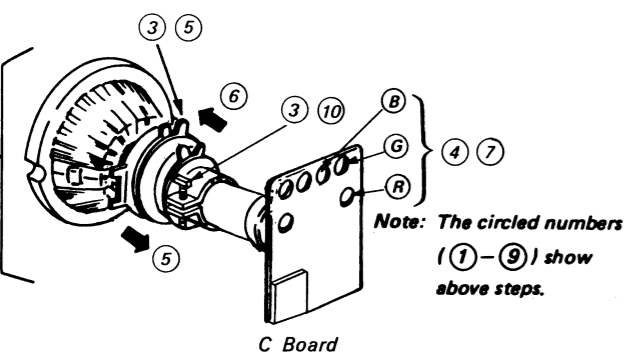


Fig. 3-3



Note: The circled numbers (1-9) show above steps.

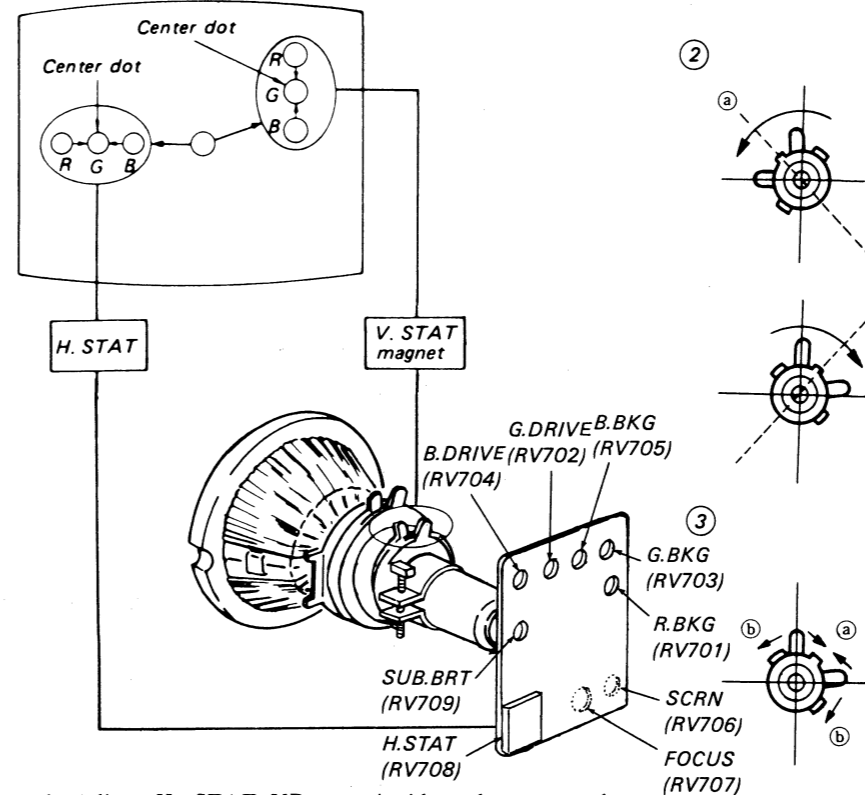
C Board

#### 3-2. CONVERGENCE

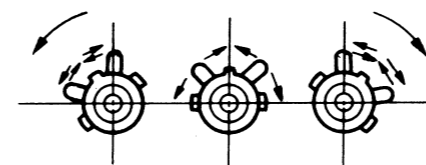
Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHT control to minimum and PICTURE control mechanical center.
- Feed in a dot pattern.

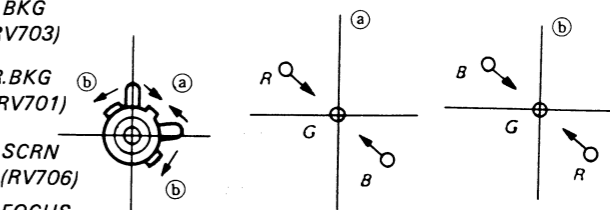
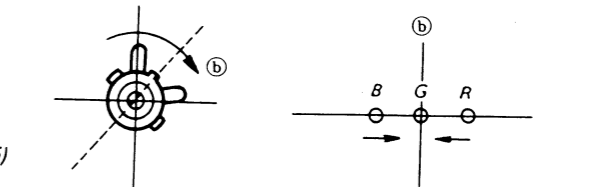
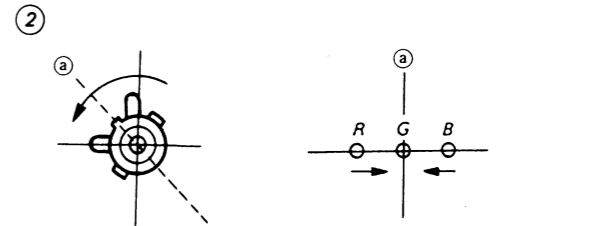
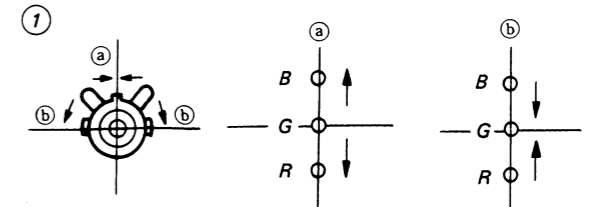
##### (1) Horizontal and Vertical Static Convergence



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.

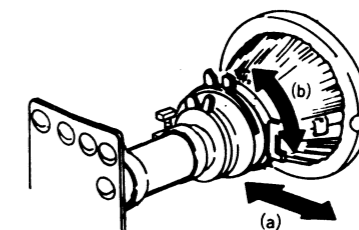


If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



(2) Dyn

Preparati

- Befor Static

1. Lo
2. Re
3. Mc
4. Tif
5. Ins

#### 3-3.

[SCRI

1. I
2. S
3. C
4. N

[WHI

1. I
2. S

## SECTION 4

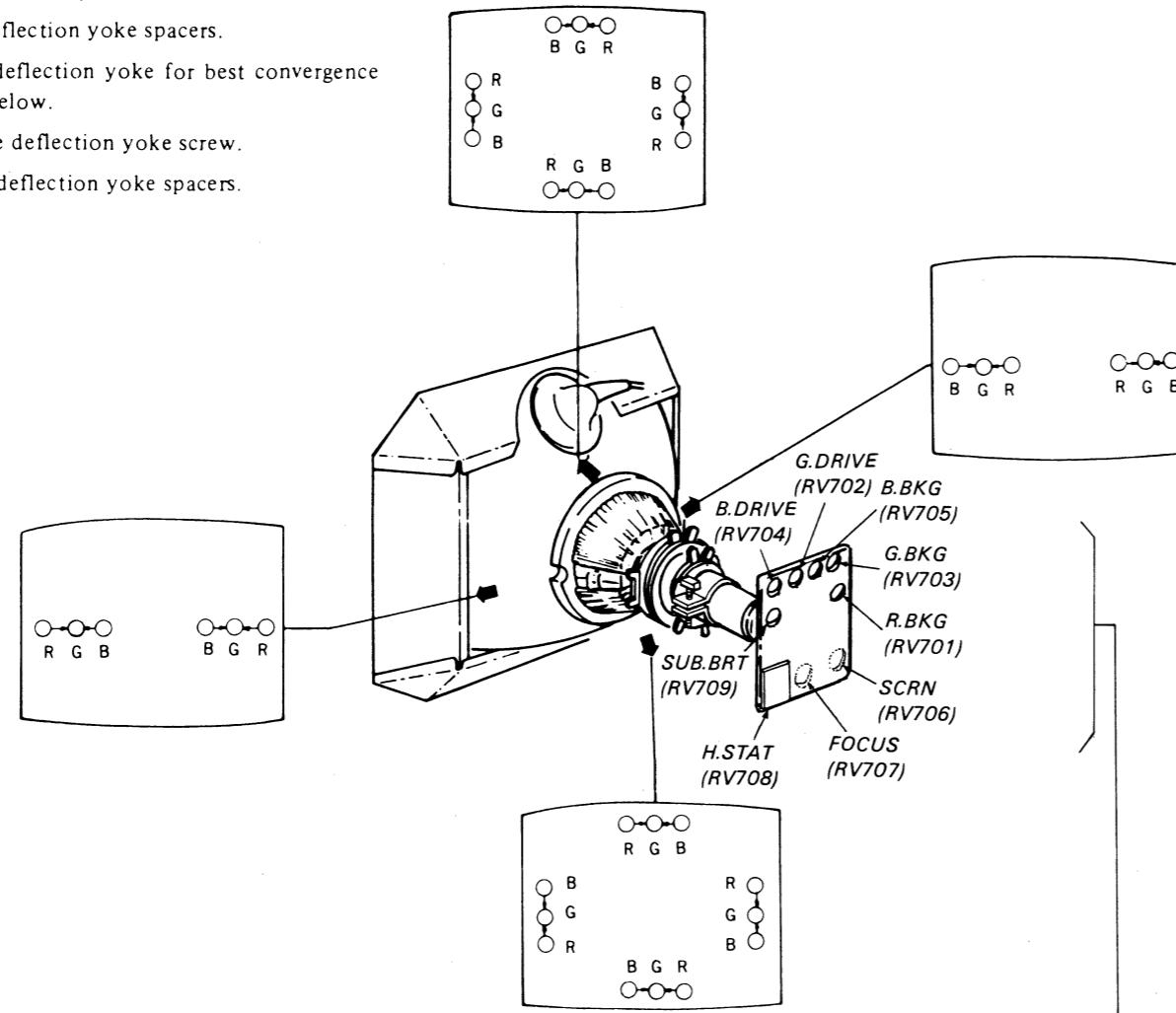
### CIRCUIT ADJUSTMENTS

#### (2) Dynamic Convergence Adjustment

##### Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

- Loosen deflection yoke screw.
- Remove deflection yoke spacers.
- Move the deflection yoke for best convergence as shown below.
- Tighten the deflection yoke screw.
- Install the deflection yoke spacers.



#### 3-3. WHITE BALANCE

##### [SCREEN (G2)]

- Input a dots pattern.
- Set the PICTURE control at minimum and turn the BRIGHT control fully counterclockwise.
- Confirm that BKG voltage is less than 160V dc when turning RV701 (R.BKG), RV703 (G.BKG) and RV705 (B.BKG).
- Note the color which becomes visible first when turning RV706.

##### [WHITE BALANCE (Cut off)]

- Input a all white signal.
- Set the PICTURE control to minimum and turn the BRIGHT control mechanical center.

- Turn RV704 (B.DRIVE) and RV702 (G.DRIVE) fully clockwise.
- Set RV701 (R.BKG), RV703 (G.BKG) and RV705 (B.BKG) to minimum.
- Turn RV709 (SUB BRT) slowly to obtain a faintly visible cross-hatch. Note the color that first becomes visible by turning RV709. Do not turn a BKG control for this color.
- Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hatch.
- Set the PICTURE control fully clockwise. Observe the screen and adjust the DRIVE controls for best white balance.
- Repeat steps 1, through 7.

##### Note: (1) TEST EQUIPMENT REQUIRED

- Oscilloscope
- Digital multimeter
- Color-bar/pattern generator
- Variable auto-transformer
- Isolation transformer
- Regulated-dc power supply

##### (2) INPUT SIGNAL

When making these adjustments, supply a color-bar or an off-air signal.

##### (3) CONTROL SETTING

Controls and switches should be set as follows when making checks and adjustments unless otherwise noted.

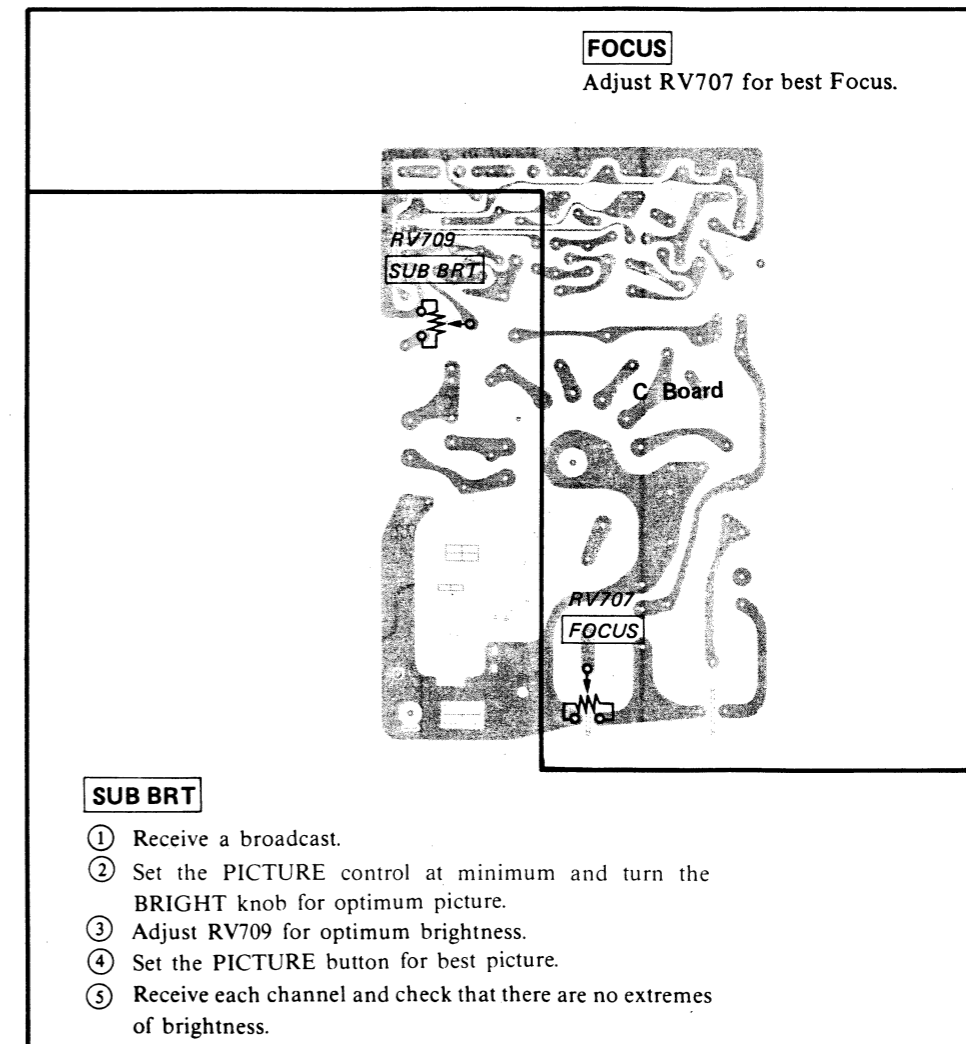
PICTURE control } initial setting  
COLOR control }

V. HOLD control ..... set for stable picture

BRIGHT control . . . . . set for best picture

- (4) These adjustments should be performed with the rated power supply voltage unless otherwise noted.

#### 4-1. C BOARD ADJUSTMENTS



##### FOCUS

Adjust RV707 for best Focus.

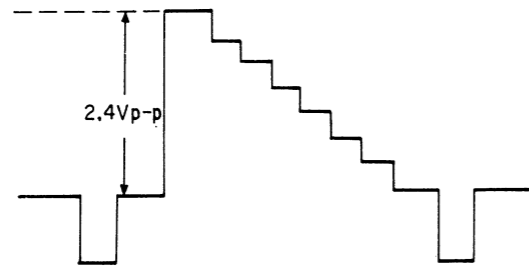
##### SUB BRT

- Receive a broadcast.
- Set the PICTURE control at minimum and turn the BRIGHT knob for optimum picture.
- Adjust RV709 for optimum brightness.
- Set the PICTURE button for best picture.
- Receive each channel and check that there are no extremes of brightness.

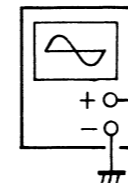
## 4.2. A BOARD ADJUSTMENTS

## SUB PICTURE

1. Feed in a color-bar signal.
  - PIC VR ..... MAX
  - BRT VR ..... center position
  - COL VR ..... MIN
  - HUE VR ..... center position
2. Connect an oscilloscope to the pin ⑰ of IC301. Turn RV305 and adjust to 2.4 Vp-p.



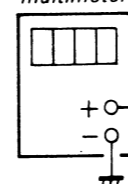
oscilloscope



## V. VOLTAGE AT CENTER TAP ADJUSTMENT (V. VIAS)

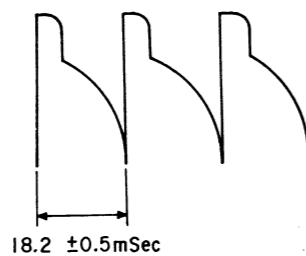
1. Feed in a monoscope signal. PICTURE control VR center position.
2. Adjust RV504 so that voltage of V.deflection yoke connector (granded side) is  $12.0 \pm 0.2$  Vdc.

digital multimeter

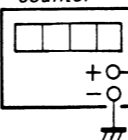


## V. FREQUENCY

1. No signal input.
2. Connect frequency counter across pin ② of IC501 and ground.
3. Adjust RV502 for  $55 \pm 0.5$  Hz on the frequency counter.



frequency counter

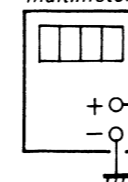


## H. FREQUENCY

- V.CENT SW (S501) ..... center position
- H.CENT ..... center position
- V.SIZE (RV503) ..... mechanical center

1. Feed in a monoscope signal.
2. Adjust RV501 so that voltage on pin ⑨ of IC301 is  $3.2 \pm 0.1$  Vdc.

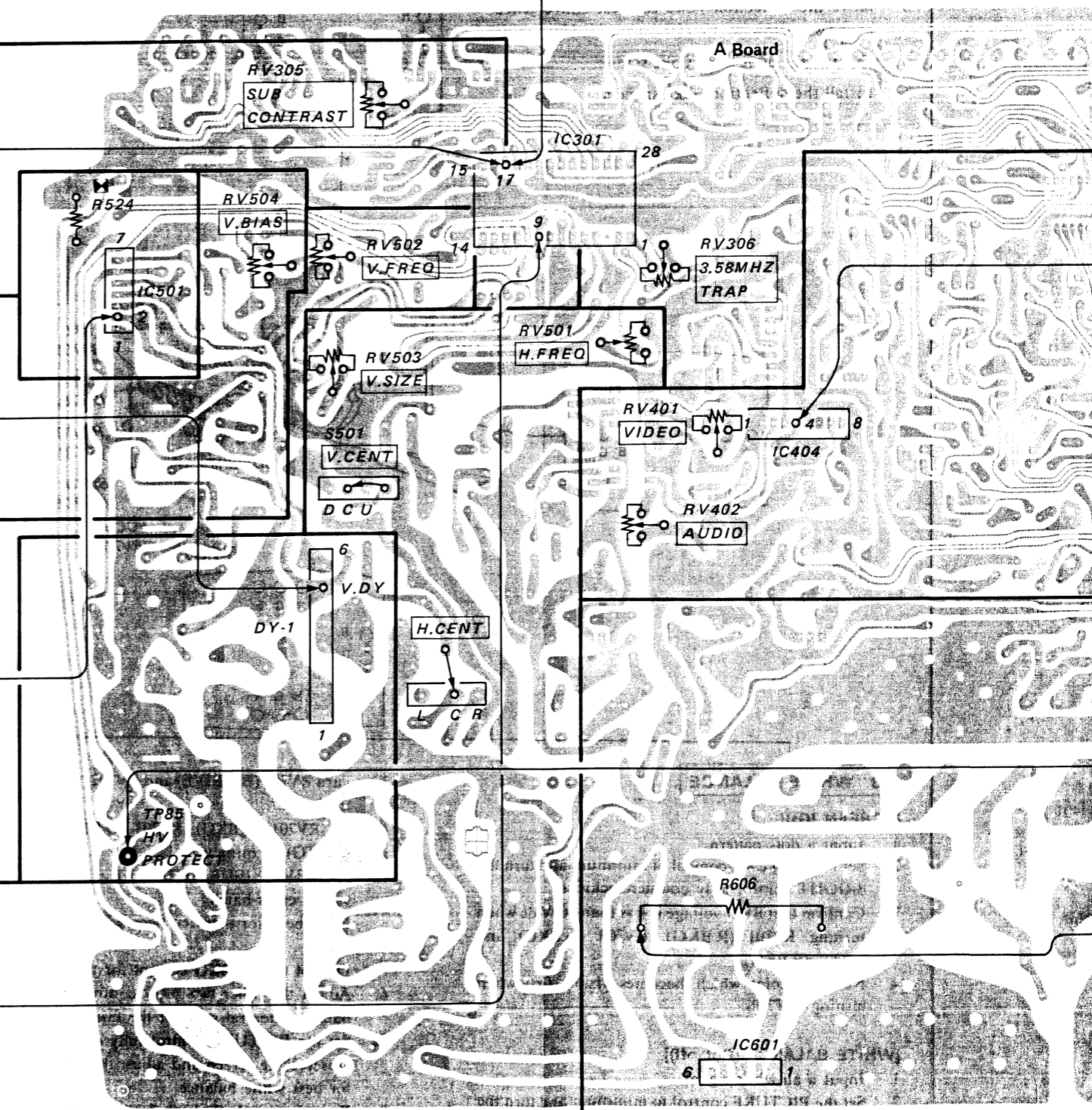
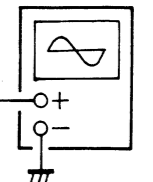
digital multimeter



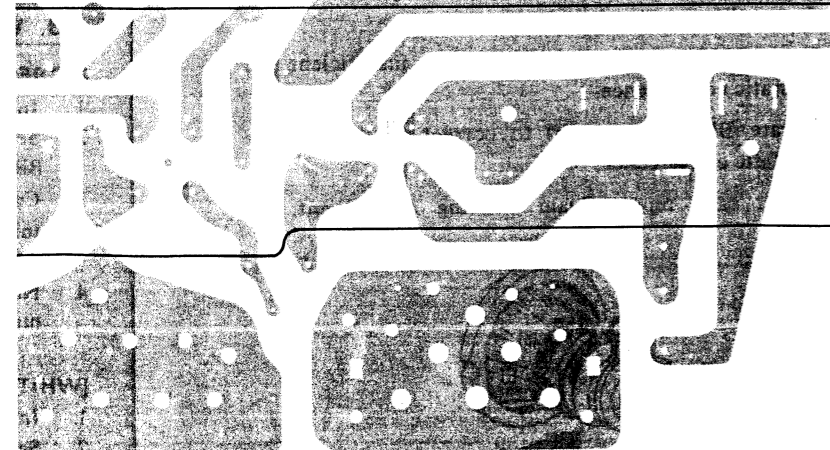
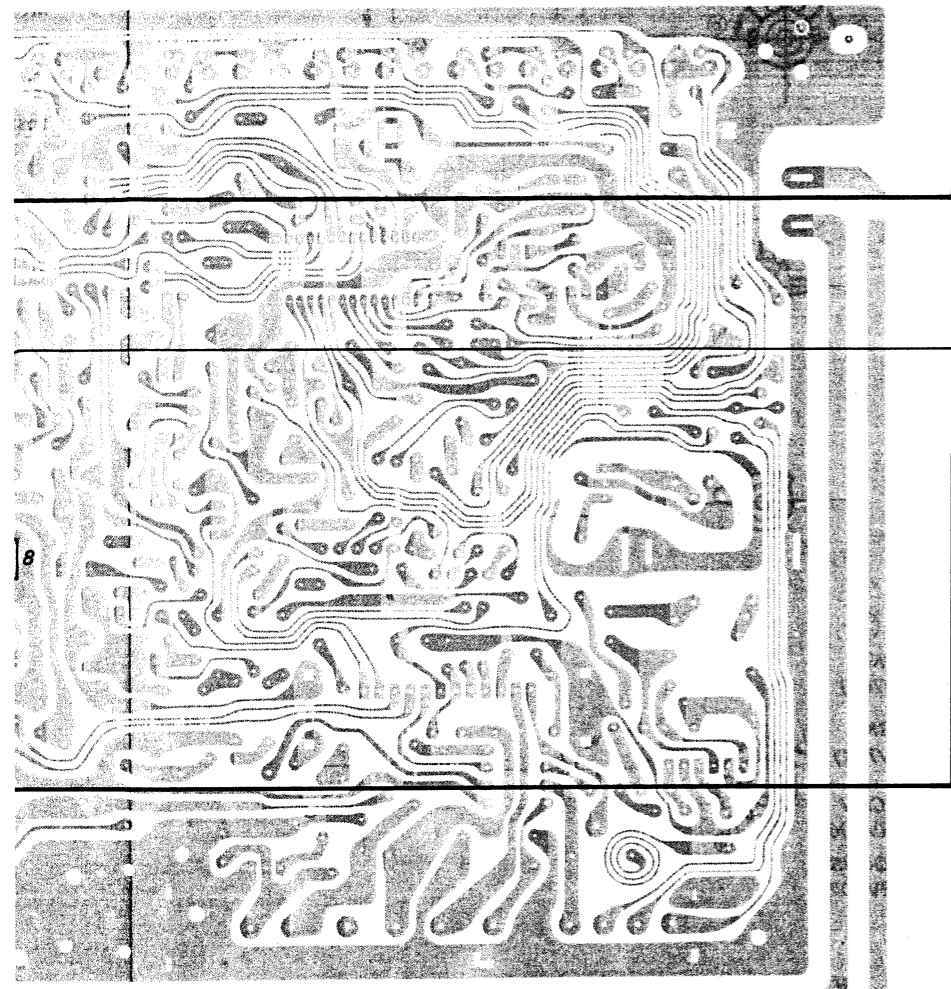
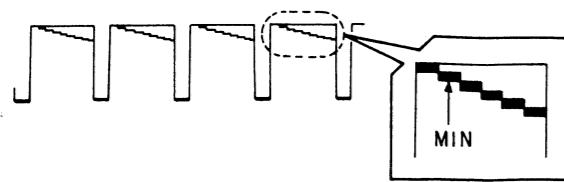
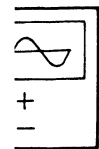
## 3.58 MHz TRAP

1. Feed in a color-bar signal  
PIC VR... MAX, BRT VR... center position  
COL VR... MIN, HUR VR... center position
2. Connect an oscilloscope to the pin ⑰ of IC301.
3. Adjust by RV306 so that chroma-components become minimum.

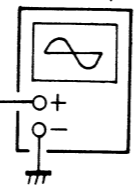
oscilloscope



illoscope



oscilloscope




## AV LEVEL ADJUSTMENT

1. Connect an oscilloscope to the DET OUT (TP-12).
2. Input a color-bar-signal to RF and VIDEO IN.  
Input signal  
RF: color-bar 87.5% TV modulation  
VIDEO: color-bar 1 Vp-p 75Ω
3. Turn the RF/VIDEO select switch ON or OFF and adjust RV401 so that the signal levels of RF and VIDEO are same.
4. Connect an oscilloscope to the pin ④ of IC404.
5. Input signal to RF and AUDIO IN.  
Input signal  
RF: dot signal. AUDIO 400 Hz (100% modulation)  
AUDIO: 400 Hz -5.62 dBs (0.408 Vrms)
6. Turn the RF/VIDEO select switch ON or OFF and adjust RV402 so that the signal levels of RF and VIDEO are same.

## 4.3. SAFETY RELATED ADJUSTMENT

## R524 ADJUSTMENT (HOLD DOWN)

When replacing the following components (marked with  on the schematic diagram), perform the adjustment as follows.

R521, R522, R523, R524, R530, R534, C307, C524, D502, D512, T503, IC301

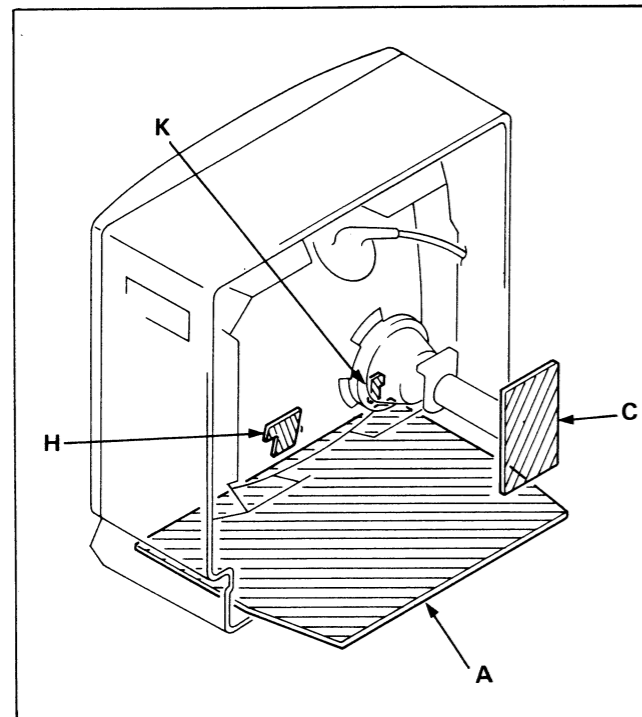
1. Receive the dot signal  
PICTURE VR..... MIN  
BRIGHT VR..... MIN
2. +B voltage check  
Confirm that the +B voltage (135V Line) is less than 136.2 Vdc during input of  $130 \begin{smallmatrix} +2.0 \\ -0 \end{smallmatrix}$  Vac.
3. Protector voltage check  
Confirm that a voltage of  $20.0 \begin{smallmatrix} +1.3 \\ -1.7 \end{smallmatrix}$  Vdc appears between TP85 and ground during input of  $120 \begin{smallmatrix} +1.0 \\ -0 \end{smallmatrix}$  Vac.
4. Operation check  
Confirm that the hold-down circuit operates (the raster diss appears) by adding  $22.75 \begin{smallmatrix} +0 \\ -0.05 \end{smallmatrix}$  Vdc between TP85 and ground.
5. Receive the dot signal.
6. Short IC601 pins ③ and ④.
7. Input of  $120 \begin{smallmatrix} +1.0 \\ -0 \end{smallmatrix}$  Vac.
8. Error operation check.  
Confirm that, applying  $139 \pm 0.5$  Vdc to +B voltage (135V Line), the hold-down circuit does not operate when changing the channel.

## CHECK AFTER IC601 REPLACEMENT

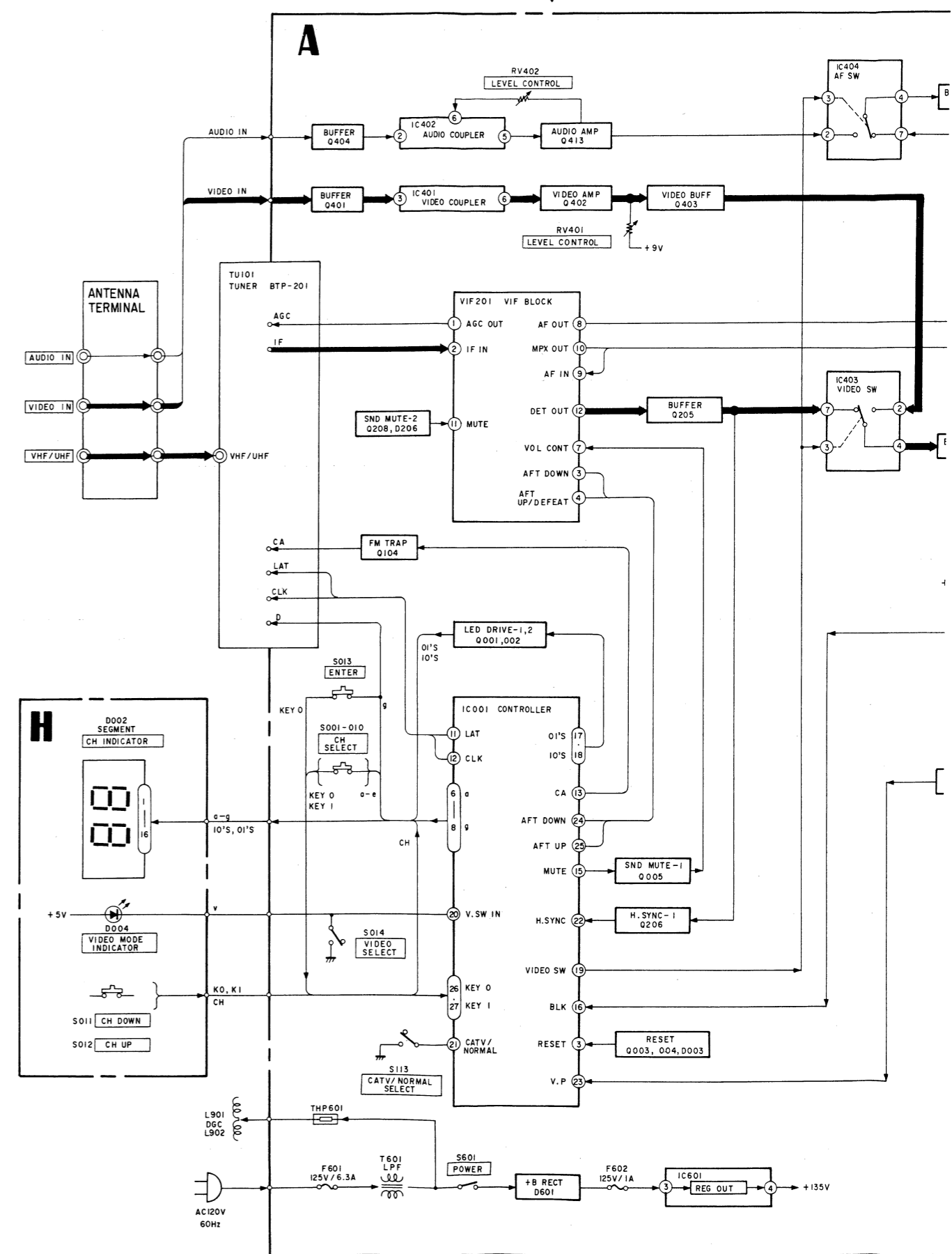
1. Supply  $130 \begin{smallmatrix} +2.0 \\ -0 \end{smallmatrix}$  Vac to with variable auto-transformer.
2. Receive the dot signal.
3. PICTURE VR..... MIN  
BRIGHT VR..... MIN
4. Confirm that the +B voltage (135V Line) is less than 136.2 Vdc.
5. If step 4 is not satisfied, replace IC601 in A board and repeat above steps.

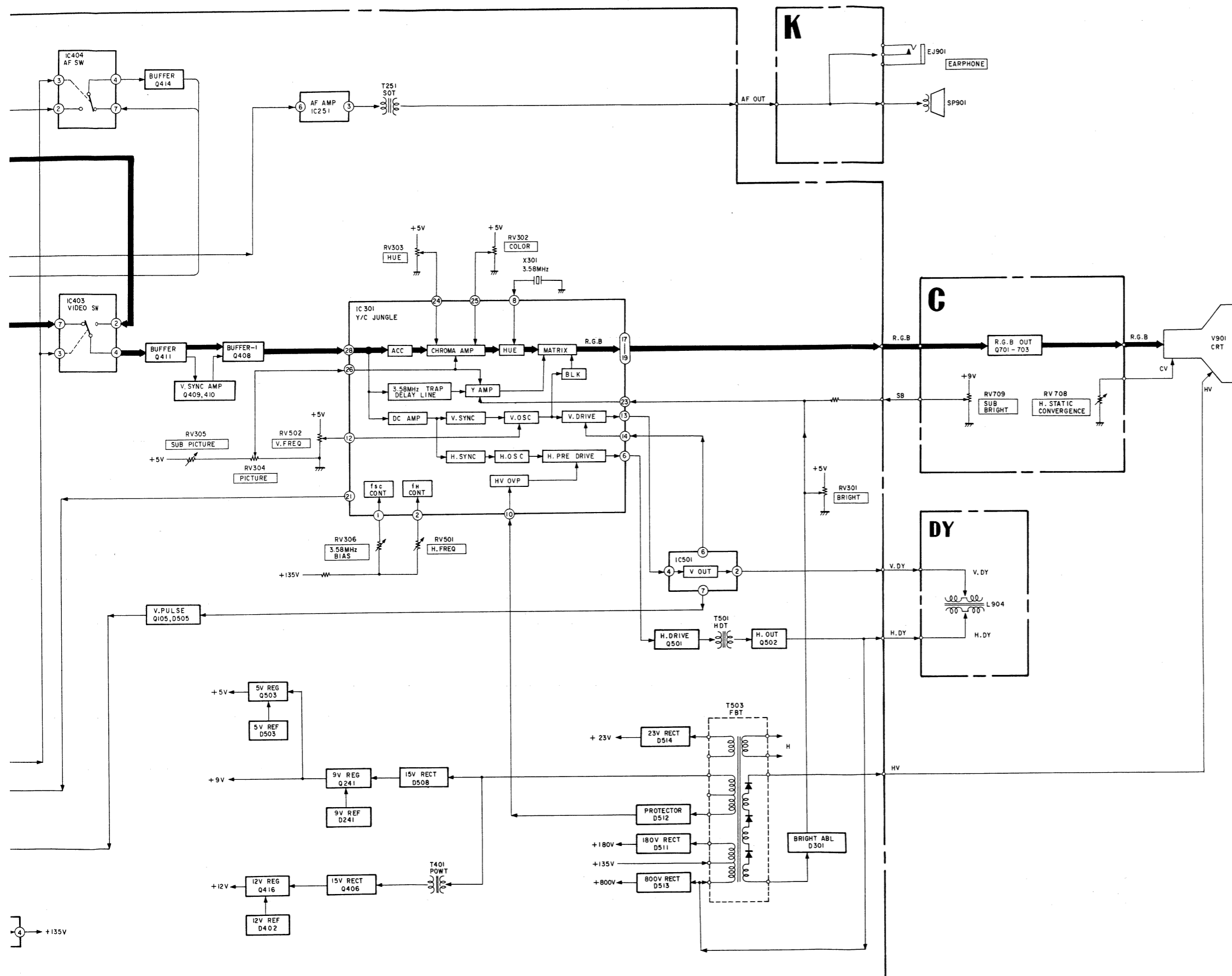
# SECTION 5 DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION





5-2. BLOCK DIAGRAM













## 5-3. SCHEMATIC DIAGRAMS



**Note:** The components identified by shading and mark  are critical for safety. Replace only with part number specified.

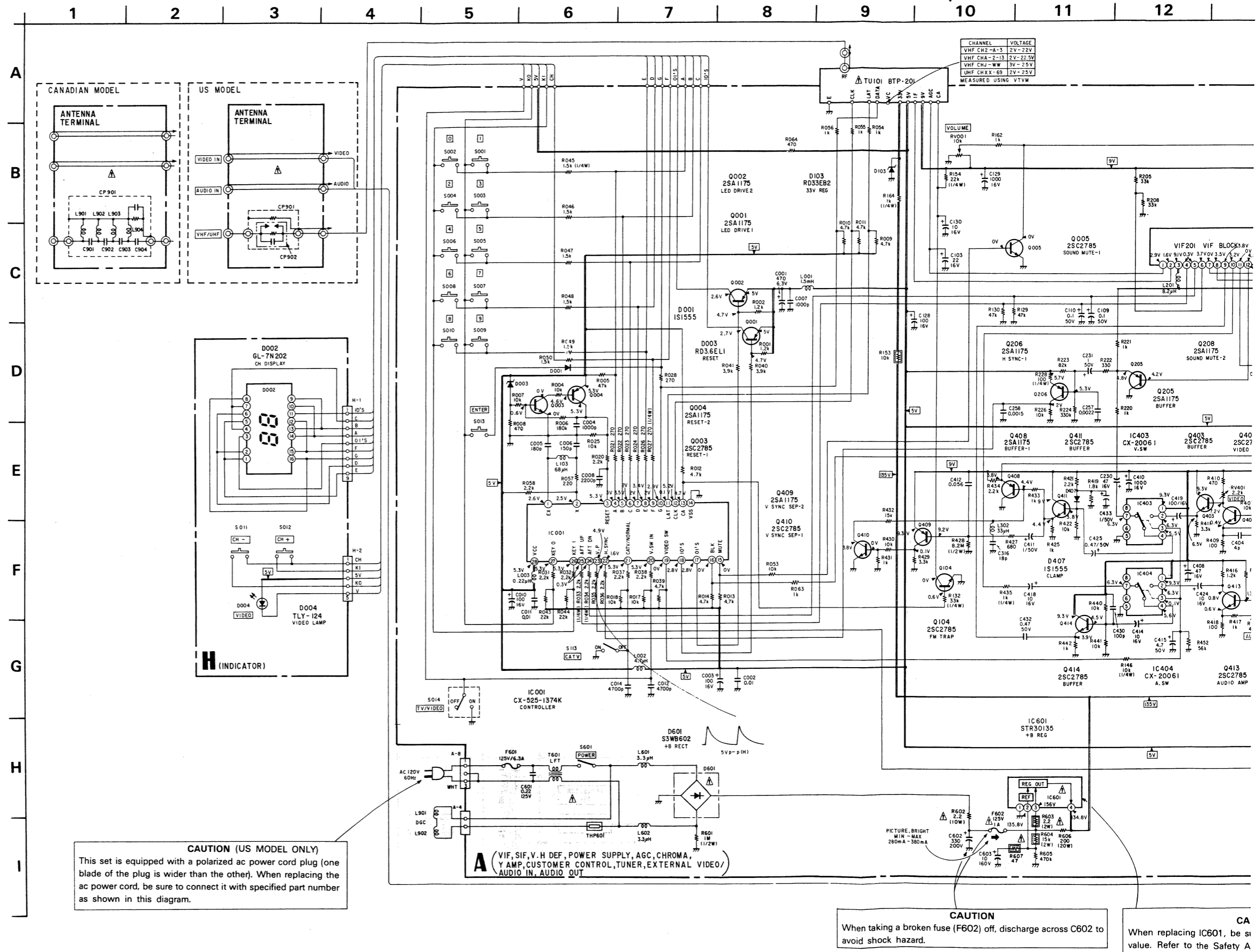
**Note:** Les composants identifiés par une trame et par une marque  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

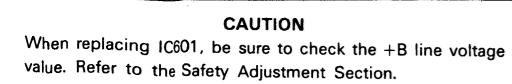
**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms,  $\frac{1}{6}$  W unless otherwise noted. K: 1000  $\Omega$ , M: 1000 k $\Omega$ .
-  : nonflammable resistor.
-  : internal component.
-  : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by  , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by  and repeat the adjustment until the specified value is achieved. (Refer to R524 adjustment on page 15.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (  )	Adjustment (  )
C307, C524, D502, D512, IC301, R521, R522, R523, R524, R530, R534, T503	R524 adjustment

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M $\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- — : B + bus.
- --- : B - bus.
- Voltage variations may be noted due to normal production tolerances.
-  : adjustment for repair.
-  : Can not be measured.





# 5-4. PRINTED WIRING BOARDS

— Conductor Side —

A

[VIF, SIF, V.H DEF, POWER SUPPLY, AGC, CHROMA,  
Y AMP, CUSTOMER CONTROL, TUNER,  
EXTERNAL VIDEO/AUDIO IN, AUDIO OUT]

KV-1365

KV-1365

C

[RGB OUT]

H

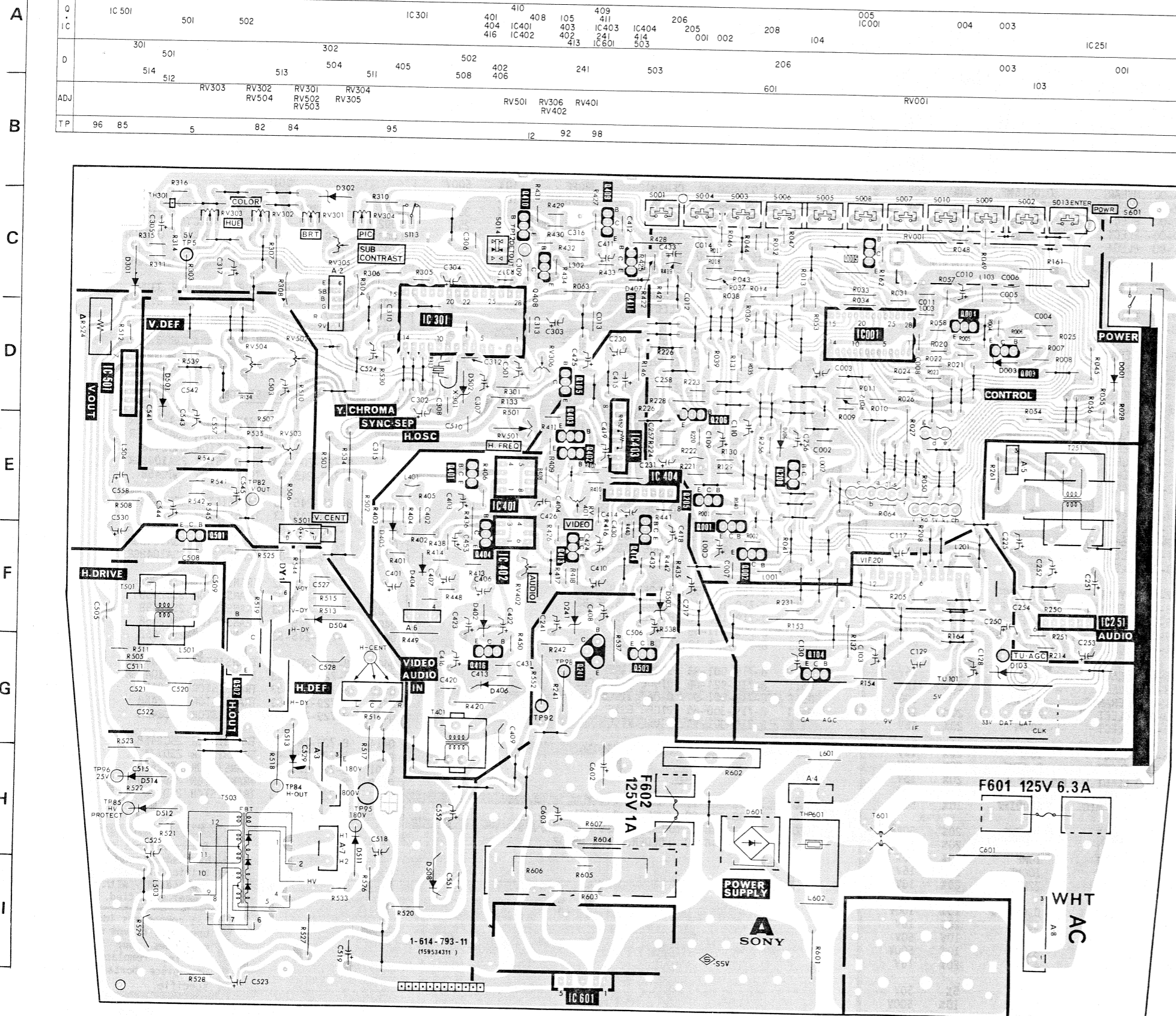
[INDICATOR]

K

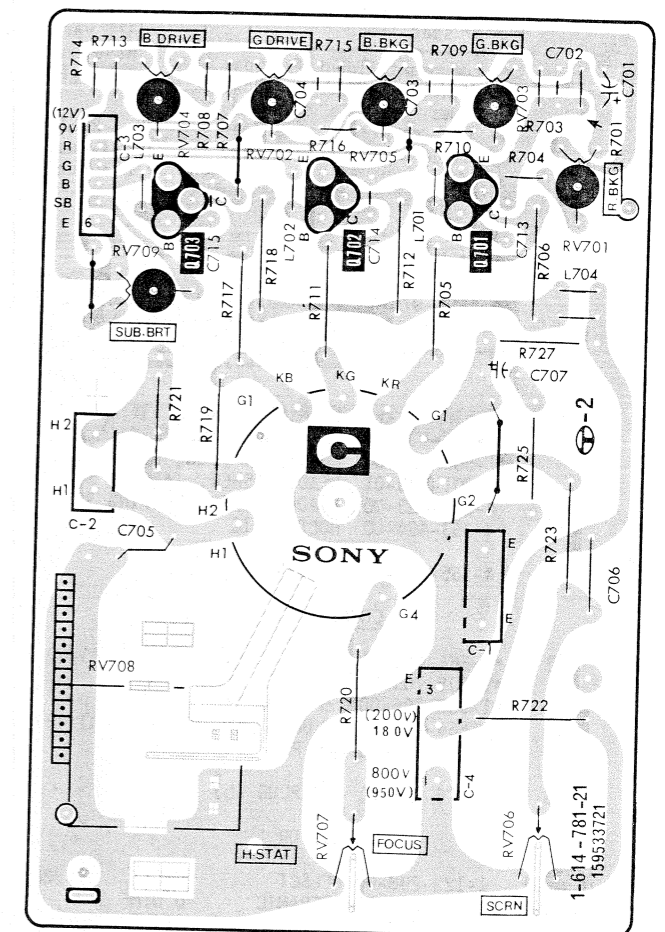
[EARPHONE].

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

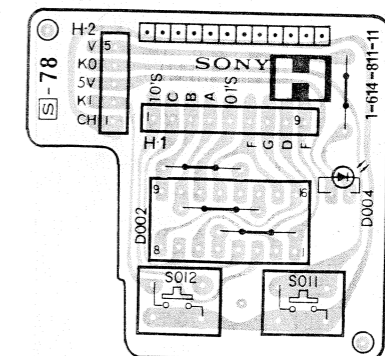
— A Board —



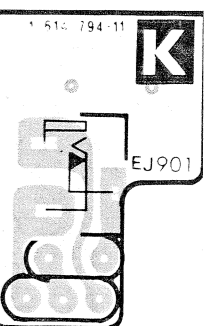
— C Board —



— H Board —

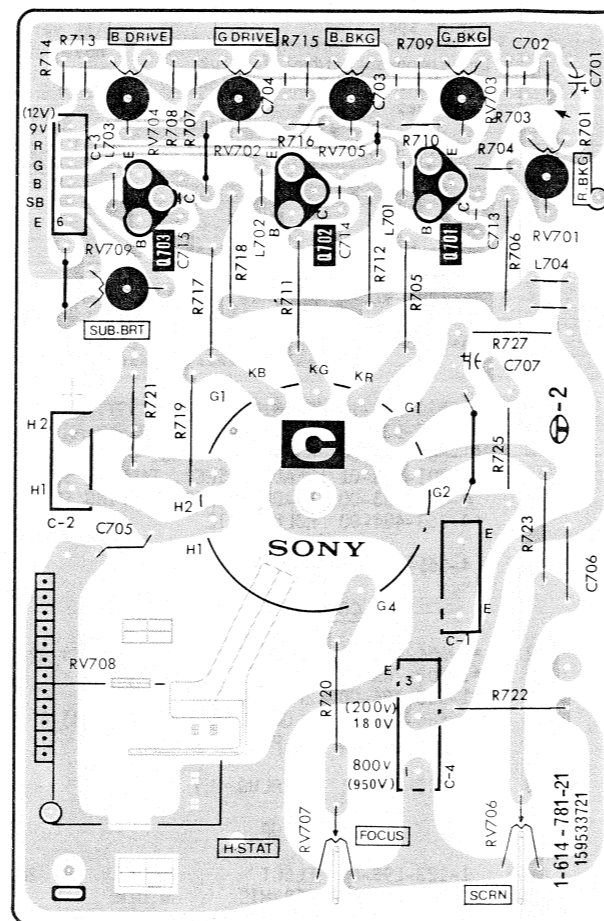
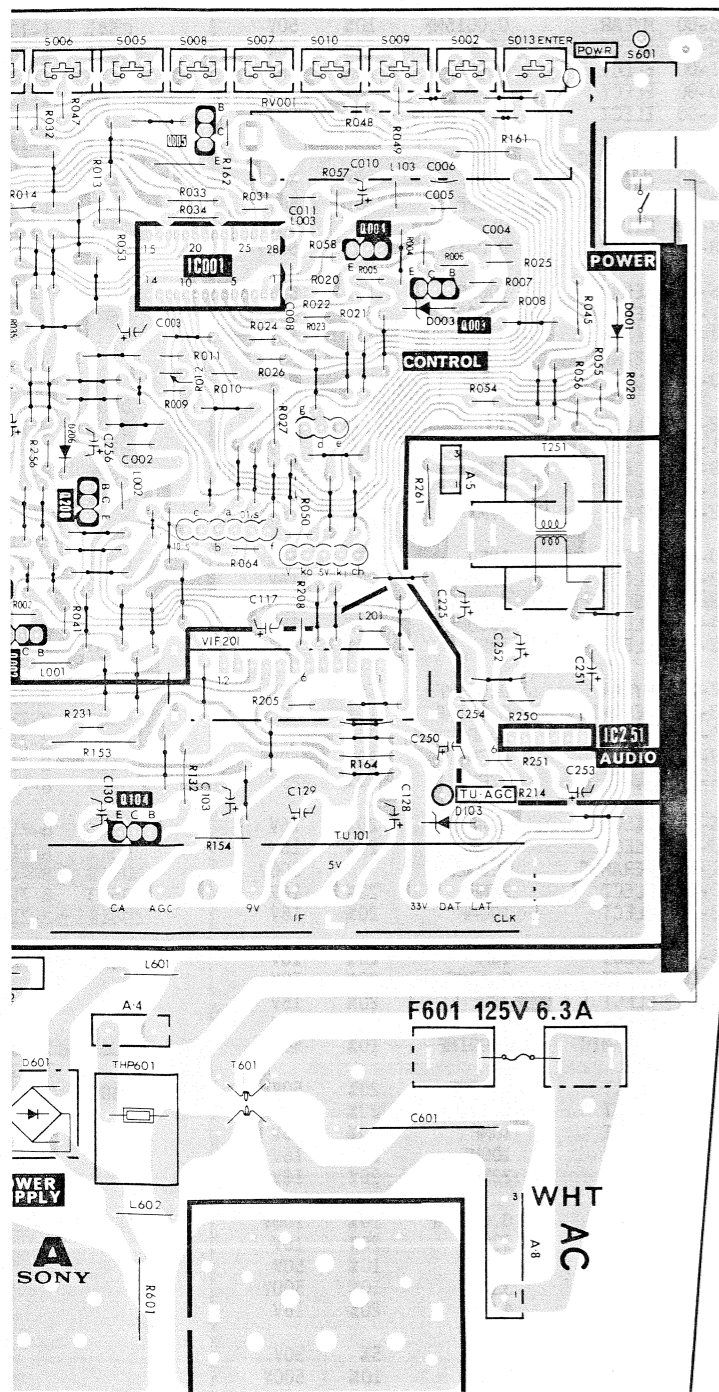
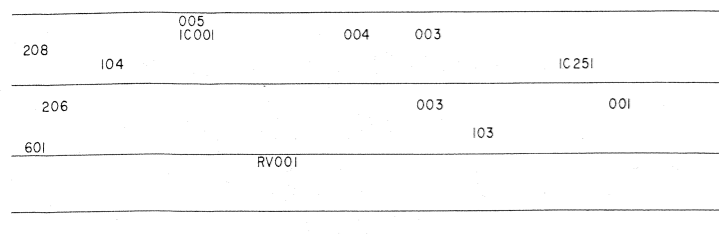


— K Board —

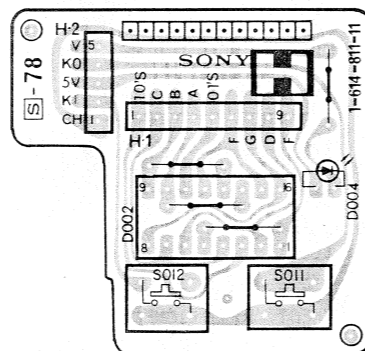


8 9 10 11 12 13 14 15 16 17

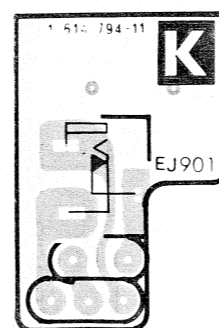
— C Board —



— H Board —



— K Board —

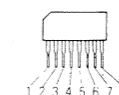
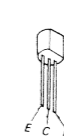


## 5-5. SEMICONDUCTORS

BX-1357



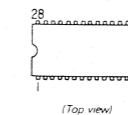
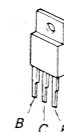
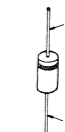
CX20061

2SA933S  
2SC1740S

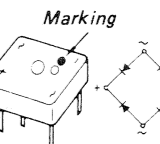
2SD774



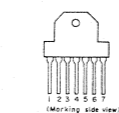
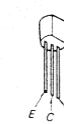
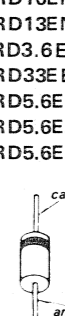
GL-7N202

CX20192  
CX525-1374K2SC1826  
2SD1406  
2SD313HP  
2SD88010E2  
ES1F  
GP08D  
RGP01-17  
RGP10G

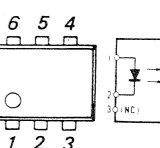
S3WB60Z



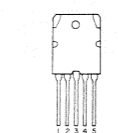
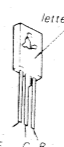
LA7830

2SC2230A  
2SC2610BK  
2SD7891S1555  
EQA02-06B  
EQA02-12A5  
HZ12A3  
HZ33EB2  
HZ6A3  
HZ6BZ  
RD10EN2  
RD13EN1  
RD3.6EL1  
RD33EB2  
RD5.6E-N3  
RD5.6EBZ7S  
RD5.6EN2

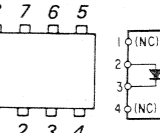
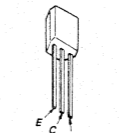
TLP531



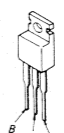
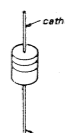
STR30135

2SC2456  
2SC2611  
2SC2688

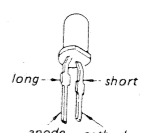
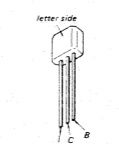
TLP551

2SA1048  
2SA1115  
2SC2458  
2SC2603

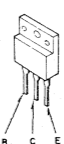
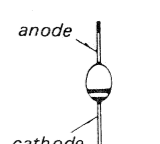
2SD1135

1SS119  
1SS133  
1SS148

TLY124

2SA1175  
2SC2785

2SD1649

SIB01-02  
SIB01-04V06C  
V19C  
V19CS  
V19E

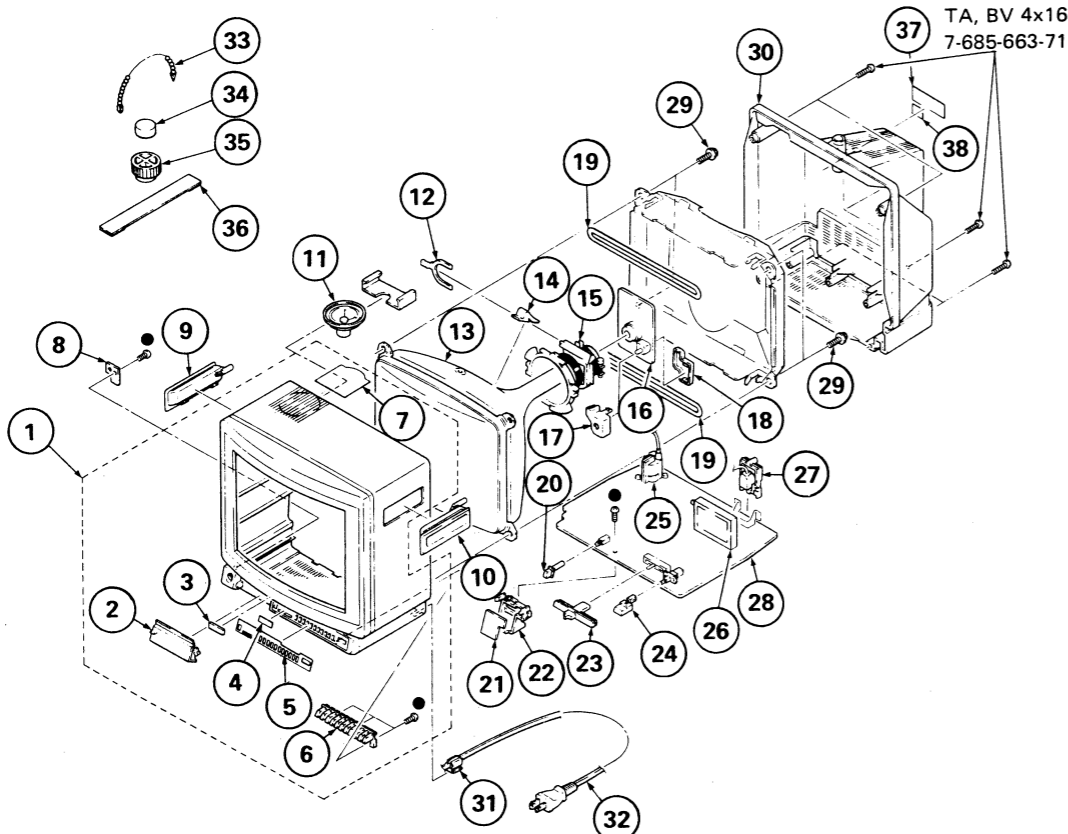
SECTION 6  
EXPLODED VIEWS

NOTE:  
• Items with no part number and no description are not stocked because they are seldom required for routine service.  
• The construction parts of an assembled part are indicated with a collation number in the remark column.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.  
Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

●: TA, BV 3x12 7-685-648-71



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	X-4374-912-1	BEZEL ASSY (USA ONLY)	2-7	20	4-374-941-01	BUTTON, SELECTION (USA ONLY)	
	X-4374-919-1	BEZEL ASSY (CND ONLY)	2-7		4-374-941-11	BUTTON, SELECTION (CND ONLY)	
2	X-4374-910-1	DOOR ASSY, CONTROL (USA ONLY)		21	*1-614-811-11	H BOARD	
	X-4374-918-1	DOOR ASSY, CONTROL (CND ONLY)		22	*4-374-945-01	HOLDER, H PC BOARD	
3	4-840-002-00	EMBLEM, SONY		23	4-374-914-11	KNOB, CONTROL	
4	4-374-938-01	WINDOW, INDICATION		24	4-374-903-31	BUTTON, POWER (USA ONLY)	
5	4-374-942-01	WINDOW, CHANNEL			4-374-903-21	BUTTON, POWER (CND ONLY)	
6	4-374-943-01	BUTTON, TUNING (USA ONLY)		25	*1-439-314-21	TRANSFORMER ASSY, FLYBACK	
	4-374-943-11	BUTTON, TUNING (CND ONLY)		26	*1-463-603-11	TUNER, ET (BTP-201)	
7	*4-374-962-01	NET, SPEAKER		27	*1-536-923-11	TERMINAL BOARD ASSY, ANTENNA (USA ONLY)	
8	*1-614-794-11	K BOARD			*1-536-939-11	TERMINAL BOARD ASSY, ANTENNA (CND ONLY)	
9	4-374-921-11	HANDLE (LEFT) (USA ONLY)		28	*A-1295-973-A	A BOARD, COMPLETE (USA ONLY)	
	4-374-921-41	HANDLE (LEFT) (CND ONLY)			*A-1296-008-A	A BOARD, COMPLETE (CND ONLY)	
10	4-374-920-11	HANDLE (RIGHT) (USA ONLY)		29	4-365-808-00	SCREW (5), TAPPING	
	4-374-920-41	HANDLE (RIGHT) (CND ONLY)		30	4-374-948-01	COVER, BACK (USA ONLY)	
11	1-503-344-11	SPEAKER			4-374-948-61	COVER, BACK (CND ONLY)	
12	1-452-277-12	MAGNET, BMC		31	*1-402-115-01	HOLDER, AC CORD	
13	*8-735-553-05	CRT (A34JBU10X)		32	*1-551-603-11	CORD, POWER	
14	3-703-961-01	SPACER, DY		33	4-308-870-00	CLIP, LEAD WIRE	
15	*1-451-234-22	DEFLECTION YOKE (SY-125A)		34	1-452-032-00	MAGNET, DISK; 10MM Ø	
16	*A-1330-601-A	C BOARD, COMPLETE		35	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
17	*4-374-912-01	COVER (MAIN), CV VOL		36	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
18	*4-374-913-01	COVER (REAR LID), CV VOL		37	3-703-228-00	LABEL, CAUTION (CND ONLY)	
19	*1-426-146-22	COIL, DEGAUSSING (USA ONLY)		38	3-703-282-00	LABEL, DOC (B) (CND ONLY)	
	*1-426-146-31	COIL, DEMAGNETIZATION (CND ONLY)					

SECTION 7  
ELECTRICAL PARTS LIST

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.  
CAPACITORS  
MF :  $\mu$ F, PF :  $\mu$ F  
COILS  
MMH : mH, UH :  $\mu$ H

• The components identified by **A** in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.  
RESISTORS  
• All resistors are in ohms  
• F : nonflammable

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	*A-1295-973-A	A BOARD, COMPLETE (USA ONLY)		C258	1-106-176-00	MYLAR	0.0015MF 10% 50V
		*****		C302	1-123-332-00	ELECT	47MF 20% 16V
	*A-1296-008-A	A BOARD, COMPLETE (CND ONLY)		C303	1-123-321-00	ELECT	220MF 20% 16V
		*****		C304	1-123-330-00	ELECT	22MF 20% 16V
				C305	1-123-381-00	ELECT	2.2MF 20% 50V
	*1-536-923-11	TERMINAL BOARD ASSY, ANTENNA (USA ONLY)		C306	1-101-004-00	CERAMIC	0.01MF 50V
	*1-536-939-11	TERMINAL BOARD ASSY, ANTENNA (CND ONLY)		C307	1-123-381-00	ELECT	2.2MF 20% 50V
	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P		C308	1-102-973-00	CERAMIC	100PF 10% 50V
	3-701-833-01	HEAD, WASHER, TAPPING SCREW		C309	1-136-169-00	FILM	0.22MF 5% 50V
	4-303-483-00	HEAD, WASHER, TAPPING SCREW		C310	1-102-038-00	CERAMIC	0.001MF 500V
	*4-363-404-00	HOLDER, IC					
	4-365-216-00	SPACER, MICA		C312	1-102-106-00	CERAMIC	100PF 10% 50V
		CONNECTOR		C313	1-102-121-00	CERAMIC	0.0022MF 10% 50V
A2	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P		C315	1-101-004-00	CERAMIC	0.01MF 50V
A3	*1-508-765-00	3P PLUG (M)		C316	1-102-953-00	CERAMIC	18PF 5% 50V
A4	*1-508-786-00	2P PLUG (M)		C317	1-123-323-00	ELECT	470MF 20% 16V
A6	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P		C401	1-123-322-00	ELECT	330MF 20% 16V
A7	*1-508-786-00	2P PLUG (M)		C402	1-101-361-00	CERAMIC	150PF 5% 50V
		CAPACITOR		C403	1-123-318-00	ELECT	33MF 20% 16V
C001	1-123-298-00	ELECT	470MF 20% 6.3V	C404	1-102-937-00	CERAMIC	4PF 0.5PF 50V
C002	1-101-004-00	CERAMIC	0.01MF 50V	C406	1-123-332-00	ELECT	47MF 20% 16V
C003	1-123-333-00	ELECT	100MF 20% 16V	C407	1-123-380-00	ELECT	1MF 20% 50V
C004	1-102-074-00	CERAMIC	0.001MF 10% 50V	C408	1-123-332-00	ELECT	47MF 20% 16V
C005	1-102-976-00	CERAMIC	180PF 5% 50V	C409	*1-161-953-51	CERAMIC	0.0047MF 20% 400V
				C410	1-123-324-00	ELECT	1000MF 20% 16V
C006	1-101-361-00	CERAMIC	150PF 5% 50V	C411	1-123-380-00	ELECT	1MF 20% 50V
C007	1-102-074-00	CERAMIC	0.001MF 10% 50V	C412	1-108-597-00	MYLAR	0.056MF 5% 50V
C008	1-102-121-00	CERAMIC	0.0022MF 10% 50V	C413	1-162-318-11	CERAMIC	0.001MF 10% 500V
C010	1-123-333-00	ELECT	100MF 20% 16V	C414	1-123-356-00	ELECT	10MF 20% 16V
C011	1-101-004-00	CERAMIC	0.01MF 50V	C415	1-123-369-00	ELECT	4.7MF 20% 50V
C012	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C416	1-123-334-00	ELECT	220MF 20% 25V
C014	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C418	1-123-356-00	ELECT	10MF 20% 16V
C103	1-123-330-00	ELECT	22MF 20% 16V	C419	1-123-333-00	ELECT	100MF 20% 16V
C109	1-123-586-00	ELECT	0.1MF 20% 50V	C420	1-101-821-00	CERAMIC	0.0022MF 500V
C110	1-123-586-00	ELECT	0.1MF 20% 50V	C422	1-123-330-00	ELECT	22MF 20% 16V
				C423	1-123-333-00	ELECT	100MF 20% 16V
C111	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C424	1-123-356-00	ELECT	10MF 20% 16V
C117	1-123-380-00	ELECT	1MF 20% 50V	C425	1-123-379-00	ELECT	0.47MF 20% 50V
C128	1-123-333-00	ELECT	100MF 20% 16V	C426	1-123-318-00	ELECT	33MF 20% 16V
C129	1-123-324-00	ELECT	1000MF 20% 16V	C430	1-102-106-00	CERAMIC	100PF 10% 50V
C130	1-123-356-00	ELECT	10MF 20% 16V	C431	1-162-318-11	CERAMIC	0.001MF 10% 500V
C217	1-123-321-00	ELECT	220MF 20% 16V	C432	1-124-655-11	ELECT	0.47MF 20% 50V
C225	1-123-932-00	ELECT	4.7MF 20% 160V	C433	1-123-380-00	ELECT	1MF 20% 50V
C230	1-123-332-00	ELECT	47MF 20% 16V	C435	1-123-356-00	ELECT	10MF 20% 25V
C231	1-123-380-00	ELECT	1MF 20% 50V	C501	1-123-333-00	ELECT	100MF 20% 16V
C241	1-123-332-00	ELECT	47MF 20% 16V	C503	1-123-330-00	ELECT	22MF 20% 16V
C250	1-123-357-00	ELECT	22MF 20% 35V	C505	1-106-184-00	MYLAR	0.0033MF 10% 100V
C252	1-123-930-00	ELECT	2.2MF 20% 160V	C506	1-123-318-00	ELECT	33MF 20% 16V
C253	1-123-384-00	ELECT	10MF 20% 100V	C508	1-102-112-00	CERAMIC	330PF 10% 50V
C254	1-106-184-00	MYLAR	0.0033MF 10% 100V	C509	1-102-030-00	CERAMIC	330PF 10% 500V
				C510	1-124-283-00	ELECT	4.7MF 20% 16V
C256	1-123-318-00	ELECT	33MF 20% 16V	C511	1-161-267-00	CERAMIC	47PF 5% 50V
C257	1-102-121-00	CERAMIC	0.0022MF 10% 50V	C515	1-102-212-00	CERAMIC	820PF 10% 500V
				C518	1-123-384-00	ELECT	10MF 20% 100V

SECTION 7  
ELECTRICAL PARTS LIST

KV-1365 KV-1365

A

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• Items marked "A" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS  
• All resistors are in ohms  
• F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS  
• MF :  $\mu$ F, PF :  $\mu$ F • MMH : mH, UH :  $\mu$ H

• The components identified by **A** in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

A

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C519	1-123-024-00	ELECT 33MF	160V	IC			
C520	<b>A</b> 1-162-115-51	CERAMIC 330PF	10%	IC001	8-759-914-09	IC CX525-1374K	
C521	1-106-198-00	MYLAR 0.012MF	10%	IC251	<b>A</b> 8-741-135-70	IC BX1357	
C522	<b>A</b> 1-136-063-11	FILM 0.0055MF	3%	IC301	8-752-019-20	IC CX20192	
C523	1-123-932-00	ELECT 4.7MF	20%	IC401	8-719-800-43	DIODE TLP551	
C524	1-123-356-00	ELECT 10MF	20%	IC402	8-719-800-83	DIODE TLP531-AUDIO	
C525	1-123-356-00	ELECT 10MF	20%	IC403	8-752-006-10	IC CX20061	
C527	1-136-173-00	FILM 0.47MF	5%	IC404	8-752-006-10	IC CX20061	
C528	1-136-136-00	FILM 0.24MF	5%	IC501	8-759-801-98	IC LA7830	
C529	1-102-223-00	CERAMIC 0.0047MF	10%	IC601	<b>A</b> 8-749-901-35	IC STR30135	
C530	1-123-346-00	ELECT 220MF	20%	COIL			
C541	1-102-030-00	CERAMIC 330PF	10%	L001	1-407-494-00	MICRO INDUCTOR 1.5MMH	
C542	1-108-835-00	MYLAR 0.0068MF	10%	L002	1-408-438-11	MICRO INDUCTOR 4.7UH	
C543	1-123-345-00	ELECT 100MF	20%	L003	1-408-877-00	MICRO INDUCTOR 0.22UH	
C544	1-124-117-00	ELECT 680MF	10%	L103	1-408-452-31	MICRO INDUCTOR 68UH	
C545	1-123-332-00	ELECT 47MF	20%	L201	1-408-441-31	MICRO INDUCTOR 8.2UH	
C551	1-102-212-00	CERAMIC 820PF	10%	L302	1-408-415-00	MICRO INDUCTOR 33UH	
C552	1-123-335-00	ELECT 330MF	20%	L401	1-408-441-31	MICRO INDUCTOR 8.2UH	
C557	1-101-810-00	CERAMIC 100PF	5%	L501	1-407-365-00	COIL, CHOKE	
C558	1-123-380-00	ELECT 1MF	20%	L503	1-407-699-00	MICRO INDUCTOR 33UH	
C601	<b>A</b> 1-130-682-51	FILM 0.22MF	20%	L601	<b>A</b> 1-408-225-00	MICRO INDUCTOR 3.3UH	
C602	1-125-338-00	ELECT(BLOCK) 330MF	20%	L602	<b>A</b> 1-408-225-11	MICRO INDUCTOR 3.3UH	
C603	1-123-933-00	ELECT 10MF	20%	TRANSISTOR			
DIODE				Q001	8-729-204-83	TRANSISTOR 2SA1048GR	
D001	8-719-911-19	DIODE 1SS119		Q002	8-729-204-83	TRANSISTOR 2SA1048GR	
D003	8-719-101-38	DIODE RD3.6E-L1		Q003	8-729-245-83	TRANSISTOR 2SC2458	
D103	8-719-101-04	DIODE RD33E-B2		Q004	8-729-204-83	TRANSISTOR 2SA1048GR	
D206	8-719-911-19	DIODE 1SS119		Q005	8-729-245-83	TRANSISTOR 2SC2458	
D241	8-719-102-91	DIODE RD10E-N2		Q104	8-729-245-83	TRANSISTOR 2SC2458	
D301	8-719-200-02	DIODE 10E2		Q105	8-729-245-83	TRANSISTOR 2SC2458	
D302	8-719-102-71	DIODE RD5.6E-N2		Q205	8-729-204-83	TRANSISTOR 2SA1048GR	
D402	8-719-102-99	DIODE RD13E-N1		Q206	8-729-204-83	TRANSISTOR 2SA1048GR	
D405	8-719-911-19	DIODE 1SS119		Q208	8-729-204-83	TRANSISTOR 2SA1048GR	
D406	8-719-928-04	DIODE ERD28-04S		Q241	8-729-288-02	TRANSISTOR 2SD880	
D407		DIODE 1SS119		Q401	8-729-245-83	TRANSISTOR 2SC2458	
D501	8-719-911-55	DIODE U05G		Q402	8-729-245-83	TRANSISTOR 2SC2458	
D502	8-719-100-35	DIODE RD5.6E-B2		Q403	8-729-245-83	TRANSISTOR 2SC2458	
D503	8-719-102-72	DIODE RD5.6E-N3		Q404	8-729-245-83	TRANSISTOR 2SC2458	
D504	8-719-911-55	DIODE U05G		Q408	8-729-204-83	TRANSISTOR 2SA1048GR	
D505	8-719-911-19	DIODE 1SS119		Q409	8-729-204-83	TRANSISTOR 2SA1048GR	
D508	8-719-901-93	DIODE V19E		Q410	8-729-245-83	TRANSISTOR 2SC2458	
D511	8-719-924-06	DIODE ERC24-06S		Q411	8-729-245-83	TRANSISTOR 2SC2458	
D512	<b>A</b> 8-719-901-94	DIODE V19CS		Q413	8-729-245-83	TRANSISTOR 2SC2458	
D513	8-719-300-65	DIODE ES1F		Q414	8-729-245-83	TRANSISTOR 2SC2458	
D514	<b>A</b> 8-719-901-93	DIODE V19E		Q416	8-729-245-83	TRANSISTOR 2SD774	
D601	<b>A</b> 8-719-503-06	DIODE S3WB60Z		Q501	8-729-168-82	TRANSISTOR 2SC2688	
FUSE				Q502	8-729-802-50	TRANSISTOR 2SD1649-CA	
F601	<b>A</b> 1-532-509-11	FUSE, GLASS TUBE 6.3A/125V		Q503	8-729-177-43	TRANSISTOR 2SD774	
	1-533-127-00	FUSE CLIP; F601					
F602	<b>A</b> 1-532-536-11	FUSE, GLASS-TUBE 1A/125V					
	*1-533-146-00	HOLDER, FUSE; F602					

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A

Ref.No.	Part No.	Description	Remark			Ref.No.	Part No.	Description	Remark		
RESISTOR						R129	1-247-871-00	CARBON	47K	5%	1/6W
R001	1-247-833-00	CARBON	1.2K	5%	1/6W	R130	1-247-871-00	CARBON	47K	5%	1/6W
R002	1-247-833-00	CARBON	1.2K	5%	1/6W	R131	1-247-871-00	CARBON	47K	5%	1/6W
R004	1-247-855-00	CARBON	10K	5%	1/6W	R132	1-247-167-00	CARBON	33K	5%	1/4W
R005	1-247-871-00	CARBON	47K	5%	1/6W	R133	1-247-171-00	CARBON	47K	5%	1/4W
R006	1-247-885-00	CARBON	180K	5%	1/6W	R134	1-247-855-00	CARBON	10K	5%	1/6W
R007	1-247-855-00	CARBON	10K	5%	1/6W	R146	1-247-155-00	CARBON	10K	5%	1/4W
R008	1-247-823-00	CARBON	470	5%	1/6W	R153	1-215-898-11	METAL OXIDE	10K	5%	2W
R009	1-247-847-00	CARBON	4.7K	5%	1/6W	R154	1-247-163-00	CARBON	22K	5%	1/4W
R010	1-247-847-00	CARBON	4.7K	5%	1/6W	R161	1-249-459-11	CARBON	12K	5%	1/4W
R011	1-247-847-00	CARBON	4.7K	5%	1/6W	R162	1-247-831-00	CARBON	1K	5%	1/6W
R012	1-247-847-00	CARBON	4.7K	5%	1/6W	R164	1-247-131-00	CARBON	1K	5%	1/4W
R013	1-247-847-00	CARBON	4.7K	5%	1/6W	R205	1-215-457-00	METAL	33K	1%	1/6W
R014	1-247-847-00	CARBON	4.7K	5%	1/6W	R208	1-215-457-00	METAL	33K	1%	1/6W
R017	1-247-855-00	CARBON	10K	5%	1/6W	R214	1-249-415-11	CARBON	680	5%	1/8W
R018	1-247-855-00	CARBON	10K	5%	1/6W	R220	1-247-831-00	CARBON	1K	5%	1/6W
R020	1-247-839-00	CARBON	2.2K	5%	1/6W	R221	1-247-831-00	CARBON	1K	5%	1/6W
R021	1-247-817-00	CARBON	270	5%	1/6W	R222	1-247-819-00	CARBON	330	5%	1/6W
R022	1-247-817-00	CARBON	270	5%	1/6W	R223	1-247-877-00	CARBON	82K	5%	1/6W
R023	1-247-817-00	CARBON	270	5%	1/6W	R224	1-247-891-00	CARBON	330K	5%	1/6W
R024	1-247-817-00	CARBON	270	5%	1/6W	R226	1-247-855-00	CARBON	10K	5%	1/6W
R025	1-247-855-00	CARBON	10K	5%	1/6W	R228	1-247-107-00	CARBON	100	5%	1/4W
R026	1-247-817-00	CARBON	270	5%	1/6W	R231	1-249-389-51	CARBON	4.7	5%	1/8W
R027	1-247-117-00	CARBON	270	5%	1/4W	R241	1-215-881-11	METAL OXIDE	15	5%	2W
R028	1-247-817-00	CARBON	270	5%	1/6W	R242	1-246-463-00	CARBON	390	5%	1/4W
R031	1-247-839-00	CARBON	2.2K	5%	1/6W	R250	1-247-865-00	CARBON	27K	5%	1/6W
R032	1-247-839-00	CARBON	2.2K	5%	1/6W	R251	1-247-879-00	CARBON	100K	5%	1/6W
R033	1-247-717-11	CARBON	2.2K	5%	1/4W	R256	1-247-879-00	CARBON	100K	5%	1/6W
R034	1-247-717-11	CARBON	2.2K	5%	1/4W	R261	1-202-359-11	SOLID	100	5%	1/4W
R035	1-247-839-00	CARBON	2.2K	5%	1/6W	R301	1-214-769-00	METAL	47K	1%	1/4W
R036	1-247-839-00	CARBON	2.2K	5%	1/6W	R303	1-247-129-00	CARBON	820	5%	1/4W
R037	1-247-839-00	CARBON	2.2K	5%	1/6W	R304	1-247-119-00	CARBON	330	5%	1/4W
R038	1-247-839-00	CARBON	2.2K	5%	1/6W	R305	1-247-819-00	CARBON	330	5%	1/6W
R039	1-247-847-00	CARBON	4.7K	5%	1/6W	R306	1-247-819-00	CARBON	330	5%	1/6W
R040	1-247-845-00	CARBON	3.9K	5%	1/6W	R307	1-247-875-00	CARBON	68K	5%	1/6W
R041	1-247-845-00	CARBON	3.9K	5%	1/6W	R308	1-246-507-00	CARBON	27K	5%	1/4W
R043	1-247-863-00	CARBON	22K	5%	1/6W	R310	1-247-171-00	CARBON	47K	5%	1/4W
R044	1-247-863-00	CARBON	22K	5%	1/6W	R311	1-247-831-00	CARBON	1K	5%	1/6W
R045	1-247-135-00	CARBON	1.5K	5%	1/4W	R313	1-247-821-00	CARBON	390	5%	1/6W
R046	1-247-835-00	CARBON	1.5K	5%	1/6W	R314	1-247-873-00	CARBON	56K	5%	1/6W
R047	1-247-835-00	CARBON	1.5K	5%	1/6W	R315	1-247-859-00	CARBON	15K	5%	1/6W
R048	1-247-835-00	CARBON	1.5K	5%	1/6W	R316	1-247-867-00	CARBON	33K	5%	1/6W
R049	1-247-835-00	CARBON	1.5K	5%	1/6W	R317	1-247-861-00	CARBON	18K	5%	1/6W
R050	1-247-835-00	CARBON	1.5K	5%	1/6W	R401	1-247-805-00	CARBON	82	5%	1/6W
R053	1-247-855-00	CARBON	10K	5%	1/6W	R402	1-247-151-00	CARBON	6.8K	5%	1/4W
R054	1-247-831-00	CARBON	1K	5%	1/6W	R403	1-247-833-00	CARBON	1.2K	5%	1/6W
R055	1-247-831-00	CARBON	1K	5%	1/6W	R404	1-247-807-00	CARBON	100	5%	1/6W
R056	1-247-831-00	CARBON	1K	5%	1/6W	R405	1-247-859-00	CARBON	15K	5%	1/6W
R057	1-247-815-00	CARBON	220	5%	1/6W	R406	1-249-405-11	CARBON	100	5%	1/8W
R058	1-247-839-00	CARBON	2.2K	5%	1/6W	R407	1-247-855-00	CARBON	10K	5%	1/6W
R063	1-247-131-00	CARBON	1K	5%	1/4W	R408	1-247-845-00	CARBON	3.9K	5%	1/6W
R064	1-247-823-00	CARBON	470	5%	1/6W	R409	1-247-807-00	CARBON	100	5%	1/6W
						R410	1-247-823-00	CARBON	470	5%	1/6W

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A

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R411	1-247-843-00	CARBON	3.3K 5% 1/6W	R526	1-246-525-00	CARBON	150K 5% 1/4W
R413	1-247-835-00	CARBON	1.5K 5% 1/6W	R527	1-214-915-00	METAL	120K 1% 1/2W
R414	1-247-859-00	CARBON	15K 5% 1/6W	R528	1-247-149-00	CARBON	5.6K 5% 1/4W
R416	1-247-833-00	CARBON	1.2K 5% 1/6W	R529	1-249-423-11	CARBON	3.3K 5% 1/8W F
R417	1-247-831-00	CARBON	1K 5% 1/6W	R530	1-247-823-00	CARBON	470 5% 1/6W
R418	1-247-807-00	CARBON	100 5% 1/6W	R533	△ 1-249-383-51	CARBON	1.5 5% 1/8W F
R419	1-247-837-00	CARBON	1.8K 5% 1/6W	R534	1-244-919-00	CARBON	82K 5% 1/2W
R420	1-215-869-11	METAL OXIDE	1K 5% 1W F	R535	1-247-131-00	CARBON	1K 5% 1/4W
R421	1-247-839-00	CARBON	2.2K 5% 1/6W	R537	1-215-862-11	METAL OXIDE	68 5% 1W F
R422	1-247-879-00	CARBON	100K 5% 1/6W	R538	1-247-831-00	CARBON	1K 5% 1/6W
R425	1-247-831-00	CARBON	1K 5% 1/6W	R539	1-247-847-00	CARBON	4.7K 5% 1/6W
R426	1-247-857-00	CARBON	12K 5% 1/6W	R541	1-247-805-00	CARBON	82 5% 1/6W
R427	1-247-827-00	CARBON	680 5% 1/6W	R542	1-247-817-00	CARBON	270 5% 1/6W
R428	1-202-730-00	SOLID	8.2M 10% 1/2W	R543	1-216-350-11	METAL OXIDE	1.2 5% 1W F
R429	1-247-843-00	CARBON	3.3K 5% 1/6W	R544	1-247-133-00	CARBON	1.2K 5% 1/4W
R430	1-247-855-00	CARBON	10K 5% 1/6W	R545	1-247-845-00	CARBON	3.9K 5% 1/6W
R431	1-247-831-00	CARBON	1K 5% 1/6W	R552	1-216-379-11	METAL OXIDE	6.8 5% 2W F
R432	1-247-859-00	CARBON	15K 5% 1/6W	R601	△ 1-202-719-51	SOLID	1M 10% 1/2W
R433	1-247-831-00	CARBON	1K 5% 1/6W	R602	△ 1-205-707-12	CEMENTED	2.2 10W
R434	1-247-839-00	CARBON	2.2K 5% 1/6W	R603	△ 1-216-373-51	METAL OXIDE	2.2 5% 2W F
R435	1-247-131-00	CARBON	1K 5% 1/4W	R604	1-215-899-11	METAL OXIDE	15K 5% 2W F
R436	1-247-706-11	CARBON	330 5% 1/4W F	R605	1-247-895-00	CARBON	470K 5% 1/6W
R438	1-247-879-00	CARBON	100K 5% 1/6W	R606	△ 1-205-700-11	CEMENTED	200 5% 20W
R440	1-247-855-00	CARBON	10K 5% 1/6W	R607	△ 1-249-401-51	CARBON	47 5% 1/8W F
R441	1-247-855-00	CARBON	10K 5% 1/6W	VARIABLE RESISTOR			
R442	1-247-831-00	CARBON	1K 5% 1/6W	RV001	1-230-794-11	RES, VAR, SLIDE	10K
R448	1-247-831-00	CARBON	1K 5% 1/6W	RV301	1-230-781-11	RES, VAR, CARBON	20KX4
R449	△ 1-202-727-51	SOLID	4.7M 10% 1/2W	RV302	1-230-781-11	RES, VAR, CARBON	20KX4
R450	1-247-825-00	CARBON	560 5% 1/6W	RV303	1-230-781-11	RES, VAR, CARBON	20KX4
R451	1-247-083-00	CARBON	10 5% 1/4W	RV304	1-230-781-11	RES, VAR, CARBON	20KX4
R452	1-247-873-00	CARBON	56K 5% 1/6W	RV305	1-230-632-11	RES, ADJ, CARBON	33K
R501	1-214-788-00	METAL	300K 1% 1/4W	RV306	1-228-992-11	RES, ADJ, CARBON	3.3K
R502	1-216-460-11	METAL OXIDE	3.9K 5% 2W F	RV401	1-228-991-00	RES, ADJ, CARBON	2.2K
R503	1-216-460-11	METAL OXIDE	3.9K 5% 2W F	RV402	1-228-993-00	RES, ADJ, CARBON	4.7K
R505	1-249-459-11	CARBON	12K 5% 1/4W F	RV501	1-228-728-00	RES, ADJ, CERAMIC CARBON	100K
R506	1-247-143-00	CARBON	3.3K 5% 1/4W	RV502	1-228-996-00	RES, ADJ, CARBON	47K
R507	1-247-843-00	CARBON	3.3K 5% 1/6W	RV503	1-228-992-11	RES, ADJ, CARBON	3.3K
R508	1-247-119-00	CARBON	330 5% 1/4W	RV504	1-228-994-00	RES, ADJ, CARBON	10K
R510	1-247-151-00	CARBON	6.8K 5% 1/4W	SWITCH			
R511	1-247-843-00	CARBON	3.3K 5% 1/6W	S001	1-554-804-11	SWITCH, PUSH (1 KEY)	
R512	1-247-831-00	CARBON	1K 5% 1/6W	S002	1-554-804-11	SWITCH, PUSH (1 KEY)	
R513	1-247-159-00	CARBON	15K 5% 1/4W	S003	1-554-804-11	SWITCH, PUSH (1 KEY)	
R515	1-247-159-00	CARBON	15K 5% 1/4W	S004	1-554-804-11	SWITCH, PUSH (1 KEY)	
R516	1-216-434-11	METAL OXIDE	1.8K 5% 1W F	S005	1-554-804-11	SWITCH, PUSH (1 KEY)	
R517	1-215-892-11	METAL OXIDE	1K 5% 2W F	S006	1-554-804-11	SWITCH, PUSH (1 KEY)	
R518	△ 1-213-146-61	METAL OXIDE	1.8K 5% 1W F	S007	1-554-804-11	SWITCH, PUSH (1 KEY)	
R519	1-247-119-00	CARBON	330 5% 1/4W	S008	1-554-804-11	SWITCH, PUSH (1 KEY)	
R520	△ 1-249-447-51	CARBON	1 5% 1/4W F	S009	1-554-804-11	SWITCH, PUSH (1 KEY)	
R521	△ 1-249-383-51	CARBON	1.5 5% 1/8W F	S010	1-554-804-11	SWITCH, PUSH (1 KEY)	
R522	1-215-854-51	METAL	15K 1% 1/4W	S013	1-554-804-11	SWITCH, PUSH (1 KEY)	
R523	1-214-747-00	METAL	5.6K 1% 1/4W	S014	1-554-824-11	SWITCH, PUSH (1 KEY)	
■ R524	△ 1-216-460-11	METAL OXIDE	3.9K 5% 2W F				

The components identified by ■ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

A	C	H
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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
S113	1-570-240-11	SWITCH, ROTARY		R703	1-247-821-00	CARBON 390 5% 1/6W	
S113	1-570-240-11	SWITCH, ROTARY		R704	1-247-841-00	CARBON 2.7K 5% 1/6W	
S501	1-554-186-00	SWITCH, LEVER		R705	1-202-824-00	SOLID 3.3K 1/2W	
S601	1-570-224-11	SWITCH, PUSH (AC POWER)(1 KEY)		R706	1-206-692-00	METAL OXIDE 15K 5% 2W F	
<u>TRANSFORMER</u>				R707	1-247-843-00	CARBON 3.3K 5% 1/6W	
T251	1-427-530-12	TRANSFORMER, OUTPUT (USA ONLY)		R708	1-247-831-00	CARBON 1K 5% 1/6W	
T251	1-427-479-11	TRANSFORMER (SOT)(CND ONLY)		R709	1-247-825-00	CARBON 560 5% 1/6W	
T401	1-421-749-11	TRANSFORMER, INSULATING		R710	1-247-841-00	CARBON 2.7K 5% 1/6W	
T501	1-437-090-00	HDT		R711	1-202-824-00	SOLID 3.3K 1/2W	
T601	1-421-357-31	TRANSFORMER, LINE FILTER (USA ONLY)		R712	1-206-692-00	METAL OXIDE 15K 5% 2W F	
T601	1-421-592-11	TRANSFORMER, FERRITE (CND ONLY)		R713	1-247-843-00	CARBON 3.3K 5% 1/6W	
<u>THERMISTOR</u>				R714	1-247-831-00	CARBON 1K 5% 1/6W	
TH301	1-800-202-XX	THERMISTOR S-10K		R715	1-247-825-00	CARBON 560 5% 1/6W	
THP601	1-800-686-51	THERMISTOR (POSITIVE)		R716	1-247-841-00	CARBON 2.7K 5% 1/6W	
<u>TUNER</u>				R717	1-202-824-00	SOLID 3.3K 1/2W	
TU101	1-463-603-11	TUNER, ET (BTP-201)		R718	1-206-692-00	METAL OXIDE 15K 5% 2W F	
<u>IF BLOCK</u>				R719	1-202-842-51	SOLID 220K 1/2W	
VIF201	1-464-478-11	IF BLOCK (IFB-450)		R720	1-202-719-00	SOLID 1M 10% 1/2W	
<u>CRYSTAL</u>				R721	1-212-359-00	METAL OXIDE 0.82 5% 1W F	
X301	1-527-396-00	CRYSTAL, OSC		R722	1-202-848-00	SOLID 680K 1/2W	
*****				R723	1-202-838-00	SOLID 100K 1/2W	
*A-1330-601-A C BOARD, COMPLETE				<u>VARIABLE RESISTOR</u>			
*****				RV701	1-230-104-00	RES, ADJ, CARBON 4.7K	
1-526-819-11 SOCKET, CRT				RV702	1-230-105-00	RES, ADJ, CARBON 3.3K	
<u>CONNECTOR</u>				RV703	1-230-104-00	RES, ADJ, CARBON 4.7K	
C2	*1-508-786-00	2P PLUG (M)		RV704	1-230-105-00	RES, ADJ, CARBON 3.3K	
C3	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P		RV705	1-230-104-00	RES, ADJ, CARBON 4.7K	
C4	*1-508-765-00	3P PLUG (M)		RV706	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
<u>CAPACITOR</u>				RV707	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
C705	1-162-116-00	CERAMIC 680PF 10% 2KV		RV708	1-230-798-11	RES, ADJ, METAL GLAZE 90M	
C706	1-129-714-00	FILM 0.01MF 10% 630V		RV709	1-230-409-11	RES, ADJ, CARBON 22K	
<u>COIL</u>				*****			
L701	1-408-420-00	MICRO INDUCTOR 82UH		*1-614-811-11 H BOARD			
L702	1-408-420-00	MICRO INDUCTOR 82UH		*****			
L703	1-408-420-00	MICRO INDUCTOR 82UH		*4-374-937-01 HOLDER, LED			
L704	1-408-424-00	MICRO INDUCTOR 180UH		<u>DIODE</u>			
<u>TRANSISTOR</u>				D002	8-719-907-50	DIODE GL-7N202	
Q701	8-729-326-11	TRANSISTOR 2SC2611		D004	8-719-812-42	DIODE TLY124	
Q702	8-729-326-11	TRANSISTOR 2SC2611		<u>CONNECTOR</u>			
Q703	8-729-326-11	TRANSISTOR 2SC2611		H1	*1-564-457-11	PLUG, CONNECTOR (2.5MM) 9P	
<u>RESISTOR</u>				H2	*1-564-453-11	PLUG, CONNECTOR (2.5MM) 5P	
R701	1-247-851-00	CARBON 6.8K 5% 1/6W		<u>SWITCH</u>			
				S011	1-554-303-00	SWITCH, KEY BOARD	
				S012	1-554-303-00	SWITCH, KEY BOARD	

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

K

Ref.No.	Part No.	Description	Remark
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	*1-614-794-11	K BOARD *****	
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## JACK

EJ901	1-507-756-00	JACK (SMALL TYPE)	
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\*\*\*\*\*

 MISCELLANEOUS  
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	1-452-032-00	MAGNET, DISK; 10MM Ø	
	1-452-094-00	MAGNET, ROTABLE DISK; 15MM Ø	
	△.1-551-603-11	CORD, POWER	
L901	△.1-426-146-22	COIL, DEGAUSSING (USA ONLY)	
	△.1-426-146-31	COIL, DEMAGNETIZATION (CND ONLY)	
L902	△.1-426-146-22	COIL, DEGAUSSING (USA ONLY)	
	△.1-426-146-31	COIL, DEMAGNETIZATION (CND ONLY)	
L904	△.1-451-234-22	DEFLECTION YOKE (SY-125A)	
SP901	1-503-344-11	SPEAKER	
T503	△.1-439-314-21	TRANSFORMER ASSY, FLYBACK	
V901	△.8-735-553-05	CRT (A34JBU10X)	

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 ACCESSORIES AND PACKING MATERIALS  
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Part No.	Description	Remark
1-501-276-00	ANTENNA, TELESCOPIC (AN-18)	
1-504-103-11	EARPHONE	
1-513-379-00	CONVERTER (EAC-25) (CND ONLY)	
1-562-443-11	CONNECTOR, ANTENNA (USA ONLY)	
4-316-037-00	BAG, POLYETHYLENE	
4-374-989-01	INDIVIDUAL CARTON	
4-374-990-01	CUSHION (UPPER) (ASSY)	
4-374-991-01	CUSHION (LOWER) (ASSY)	
4-482-081-21	MANUAL, INSTRUCTION	
4-482-081-31	MANUAL, INSTRUCTION (CND ONLY)	
4-491-213-22	INSTRUCTION (USA ONLY)	

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# KV-1365

## SONY<sup>®</sup> SERVICE MANUAL

### SUPPLEMENT

This supplement updates the service manual to include production changes starting with Serial No. 8500001.

#### INTRODUCTION

Change of schematic diagram and printed wiring boards:

#### *US Model*

*Chassis No. SCC-548X-A  
Serial No. 8500001 and later*

#### *Canadian Model*

*Chassis No. SCC-552M-A  
Serial No. 8500001 and later*

*April, 1986  
No. 1*

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**ATTENTION!!**

AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ÊTRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.


**ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!**

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

**WARNING !!**

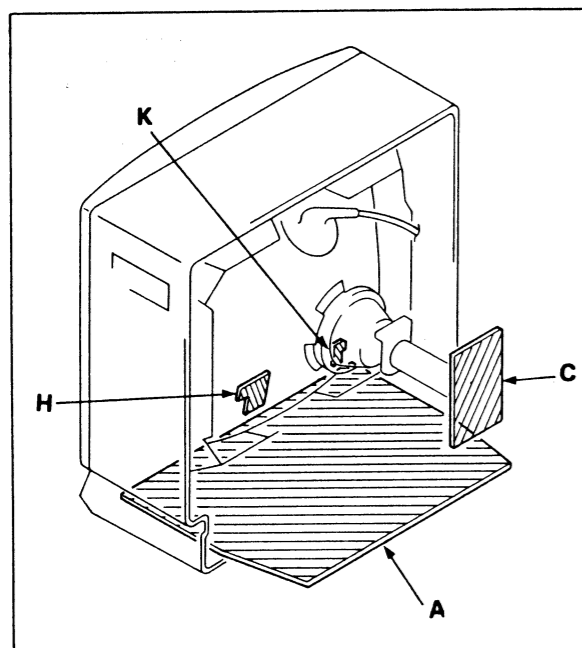
AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

**SAFETY-RELATED COMPONENT WARNING !!**

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SECTION 1  
DIAGRAMS

## 1-1. CIRCUIT BOARDS LOCATION



## 1-2. SCHEMATIC DIAGRAMS

## Note:

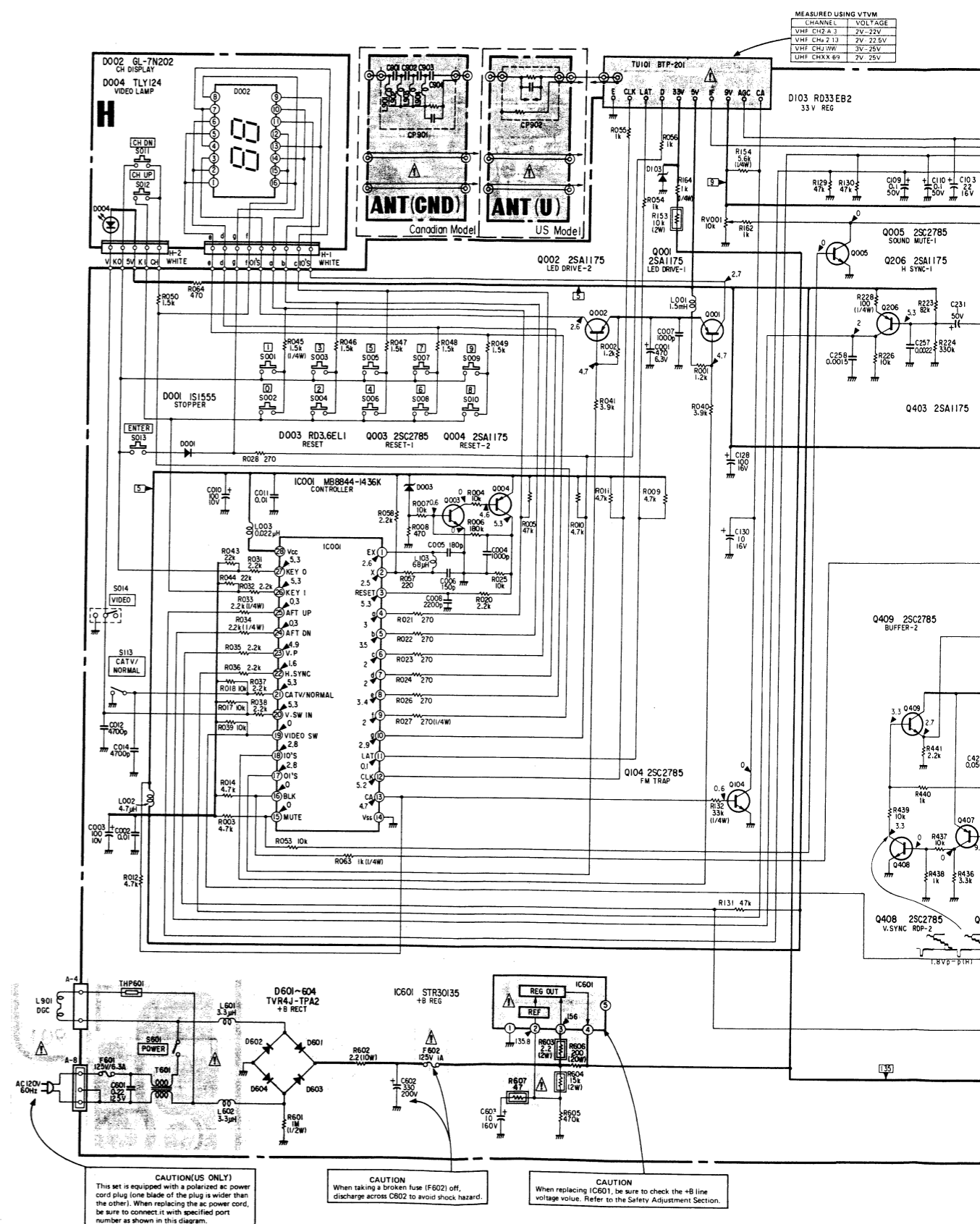
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms,  $\frac{1}{4}$  W unless otherwise noted. K: 1000  $\Omega$ , M: 1000 k $\Omega$ .
- $\square$ : nonflammable resistor.
- $\triangle$ : internal component.
- $\square$ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by  $\boxtimes$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by  $\boxtimes$ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by  $\boxtimes$  and repeat the adjustment until the specified value is achieved. (Refer to R524 adjustment on page 15.) When replacing the part in below table, be sure to perform the related adjustment.

Part replaced ( $\boxtimes$ )	Adjustment ( $\boxtimes$ )
C307, C524, D502, D512, IC301, R521, R522, R523, R524, R530, R534, T503	R524 adjustment

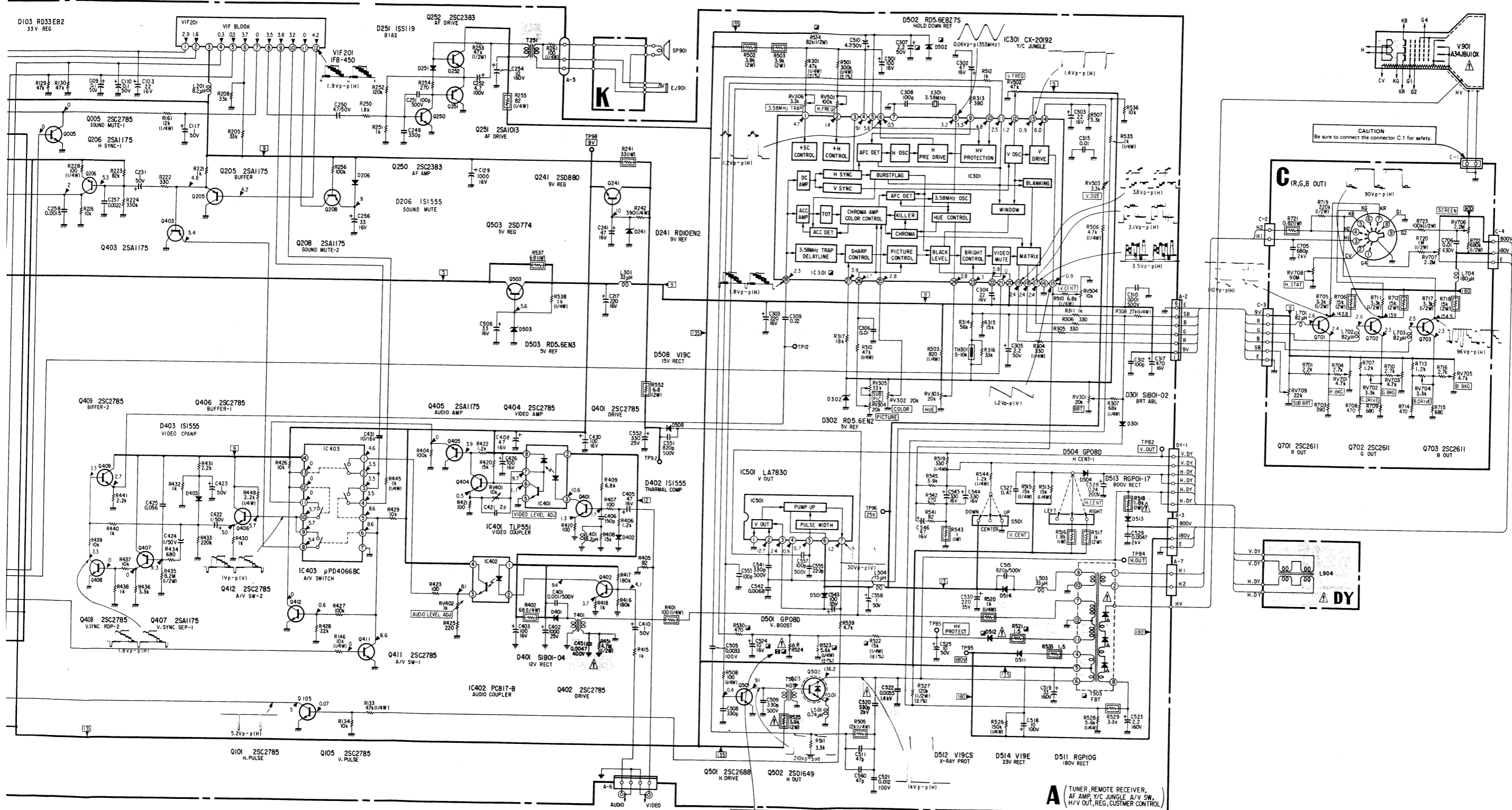
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M $\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- : B+ bus.
- : B- bus.
- Voltage variations may be noted due to normal production tolerances.
- $\square$ : adjustment for repair.
- $\times$ : Can not be measured.

Note: The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



MEASURED USING VTVM	
CHANNEL	VOLTAGE
VHF CH2 A-3	2V-25V
VHF CH2 B-3	2V-25V
VHF CH3 WW	3V-25V
UHF CHXX 60	2V-25V



## 1-3. PRINTED WIRING BOARDS

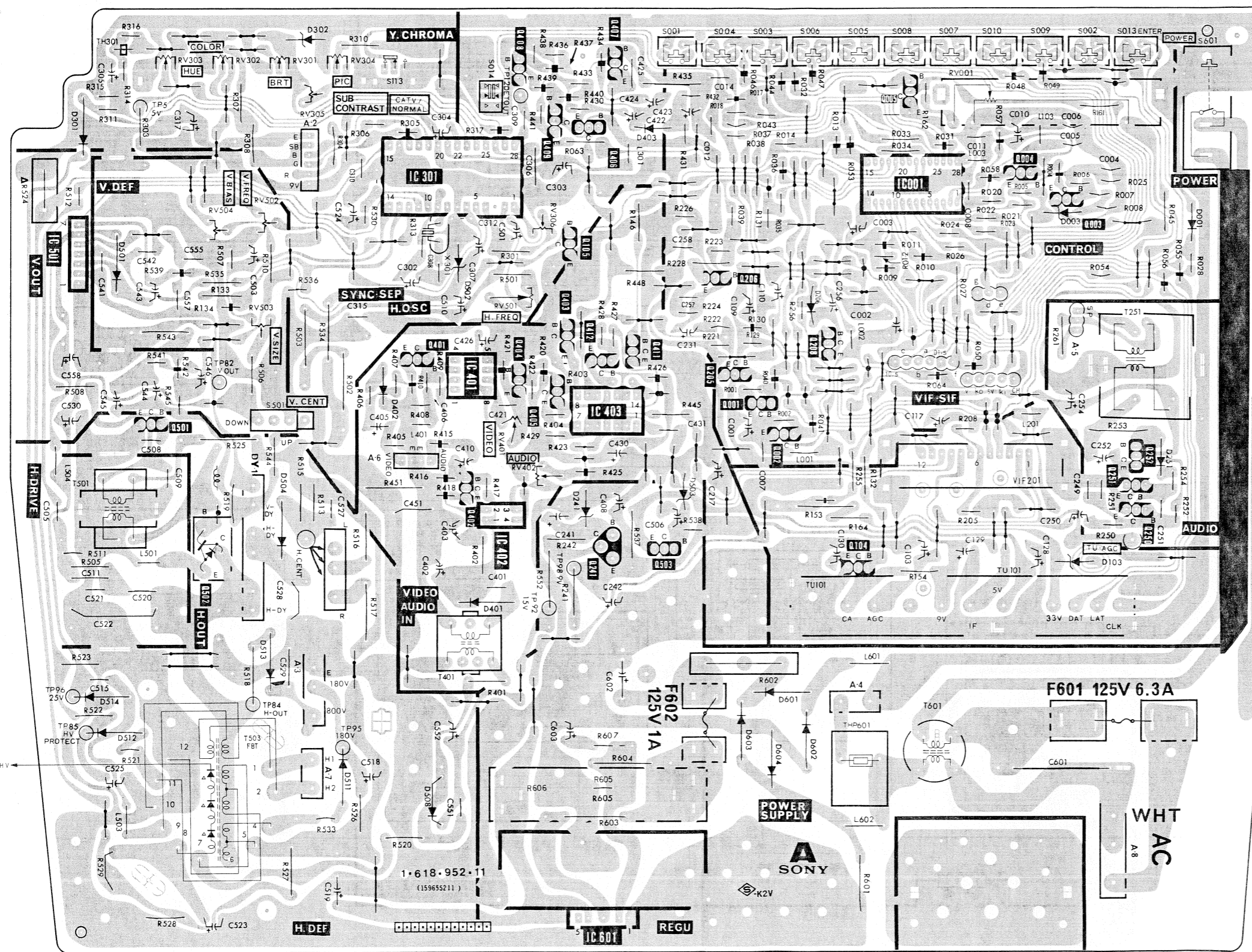
— Conductor Side —

VIF, SIF, V.H DEF, POWER SUPPLY, AGC, CHROMA,  
Y AMP, CUSTOMER CONTROL, TUNER,  
EXTERNAL VIDEO/AUDIO IN, AUDIO OUT

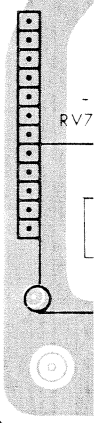
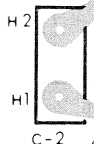
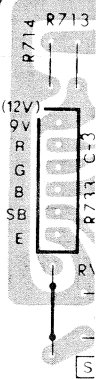
A

A

— A Board —



— C Board



— H Board



Q	IC	D	ADJ	TP
407	302	RV301		
408		RV304		
005	301	RV305		
409	403	RV001		
406				
IC301	004			
	IC001			
	003			
105	003	RV502		
	001	RV306		
IC501	501	RV504		
206	502			
	206	RV501		
403		RV503		
411, 208				
412				
401 205				
IC401	402			
404				
405				
001		RV401		
IC403				
501	252	RV402		
	251			
402	251			
IC402	250			
	241			
241	503			
502	104			
	103			
	401			
	513			
	514			
	601			
	603			
	512			
	602			
	604			
	511			
	508			
IC601				
Q	IC	D	ADJ	TP

[RGB OUT]

C

[INDICATOR]

H

[EARPHONE]

K

16

17

18

19

20

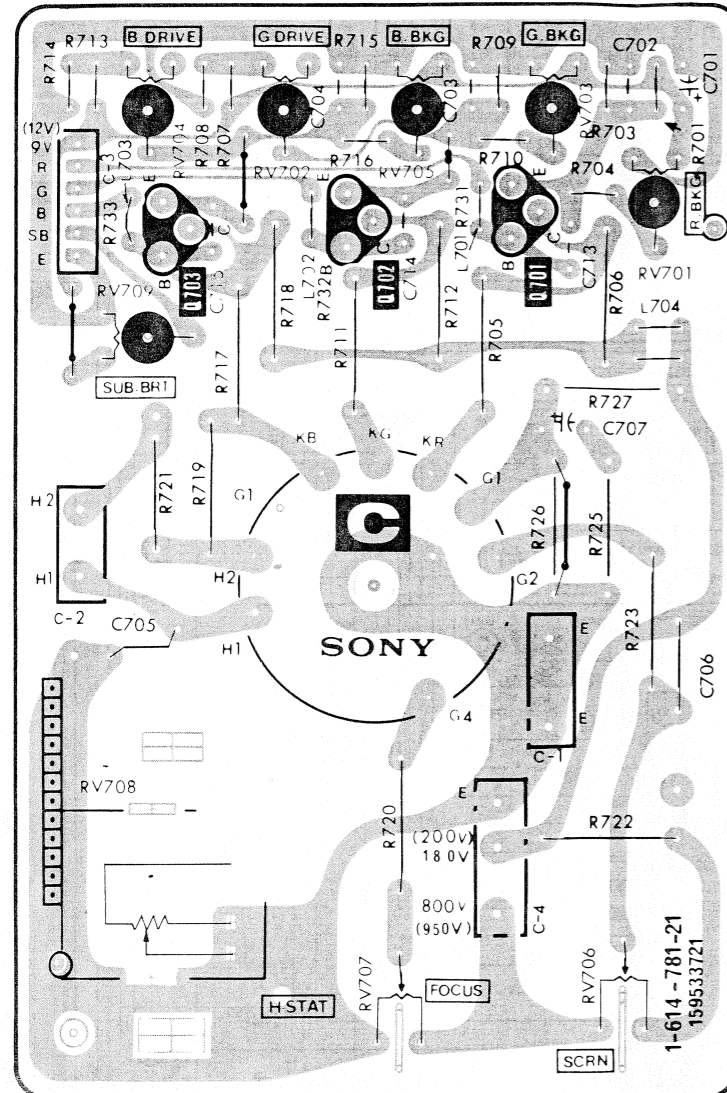
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22

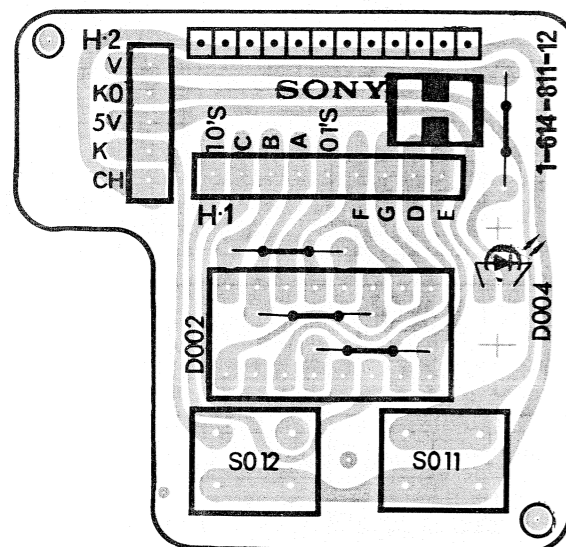
23

## 1-4. SEMICONDUCTORS

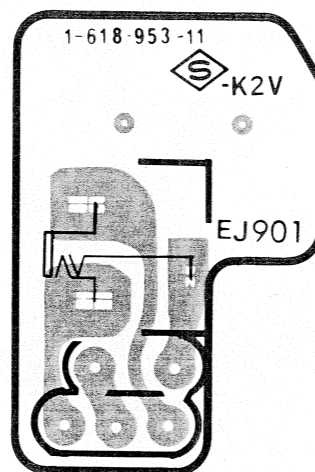
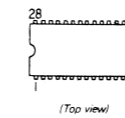
- C Board -



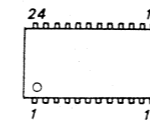
- H Board -



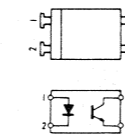
- K Board -

MB8844-1436K  
CXZ019Z

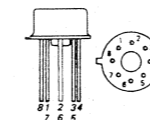
LA7830



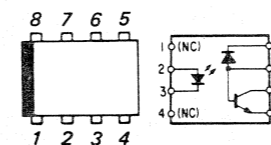
PC817-B



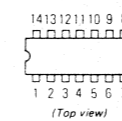
STR30135



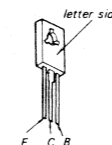
TLP551



μPD4066BC



2SA1013

2SC2785-F  
2SA1175-F2SC2611  
2SC2688

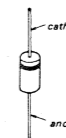
2SD1649-CA



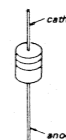
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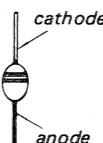
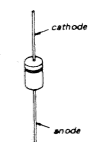
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1S1555  
RD3.6E-L1  
RD33E-B2  
RD10E-N2  
RD5.6E-N2  
RD5.6E-BZ7S  
RD5.6E-N3  
RGP01-17

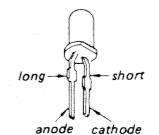
1SS119



GL-7N202

GP08D  
V19C  
V19CS  
V19ERGP10G  
SIB01-02  
SIB01-04

TLY124



## SECTION 2

### ELECTRICAL PARTS LIST

A

## NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## CAPACITORS

- MF :  $\mu$ F, PF :  $\mu$ PF

## RESISTORS

- All resistors are in ohms
- F : nonflammable

## COILS


- MMH : mH, UH :  $\mu$ H


When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	*A-1295-973-A	A BOARD, COMPLETE *****		C306	1-162-306-31	CERAMIC 0.01MF 30% 16V	
	<b>A</b> 1-536-923-12	TERMINAL BOARD ASSY, ANTENNA		C307	1-123-381-00	ELECT 2.2MF 20% 50V	
	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P		C308	1-102-973-00	CERAMIC 100PF 10% 50V	
	3-701-833-01	HEAD, WASHER, TAPPING SCREW		C309	1-136-169-00	FILM 0.22MF 5% 50V	
	4-302-428-00	HEAD, WASHER, TAPPING SCREW		C310	1-102-038-00	CERAMIC 0.001MF 500V	
	*4-363-404-00	HOLDER, IC					
	4-365-216-00	SPACER, MICA		C312	1-102-106-00	CERAMIC 100PF 10% 50V	
		<u>CONNECTOR</u>		C315	1-101-004-00	CERAMIC 0.01MF 50V	
A2	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P		C317	1-123-323-00	ELECT 470MF 20% 16V	
A3	*1-508-765-00	3P PLUG (M)		C401	1-162-318-11	CERAMIC 0.001MF 10% 500V	
A4	*1-508-786-00	2P PLUG (M)		C402	1-124-557-11	ELECT 1000MF 20% 25V	
A6	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P					
A7	*1-508-786-00	2P PLUG (M)		C403	1-123-333-00	ELECT 100MF 20% 16V	
A8	*1-506-349-21	3P PLUG (L)		C405	1-123-332-00	ELECT 47MF 20% 16V	
		<u>CAPACITOR</u>		C406	1-101-361-00	CERAMIC 150PF 5% 50V	
C001	1-123-298-00	ELECT 470MF 20% 6.3V		C410	1-123-380-00	ELECT 1MF 20% 50V	
C002	1-101-004-00	CERAMIC 0.01MF 50V		C421	1-102-939-61	CERAMIC 2PF 0.5PF 50V	
C003	1-124-443-00	ELECT 100MF 20% 10V					
C004	1-102-074-00	CERAMIC 0.001MF 10% 50V		C422	1-123-380-00	ELECT 1MF 20% 50V	
C005	1-102-976-00	CERAMIC 180PF 5% 50V		C423	1-123-380-00	ELECT 1MF 20% 50V	
C006	1-101-361-00	CERAMIC 150PF 5% 50V		C424	1-123-380-00	ELECT 1MF 20% 50V	
C007	1-102-074-00	CERAMIC 0.001MF 10% 50V		C425	1-108-597-00	MYLAR 0.056MF 5% 50V	
C008	1-102-121-00	CERAMIC 0.0022MF 10% 50V		C426	1-123-333-00	ELECT 100MF 20% 16V	
C010	1-124-443-00	ELECT 100MF 20% 10V					
C011	1-101-004-00	CERAMIC 0.01MF 50V		C430	1-123-333-00	ELECT 100MF 20% 16V	
C012	1-102-125-00	CERAMIC 0.0047MF 10% 50V		C431	1-124-645-11	ELECT 10MF 20% 16V	
C014	1-102-125-00	CERAMIC 0.0047MF 10% 50V		C451	1-161-953-00	CERAMIC 0.0047MF 20% 400V	
C103	1-123-330-00	ELECT 22MF 20% 16V		C501	1-123-333-00	ELECT 100MF 20% 16V	
C109	1-123-586-00	ELECT 0.1MF 20% 50V		C503	1-123-330-00	ELECT 22MF 20% 16V	
C110	1-123-586-00	ELECT 0.1MF 20% 50V					
C117	1-123-380-00	ELECT 1MF 20% 50V		C505	1-106-184-00	MYLAR 0.0033MF 10% 100V	
C128	1-123-333-00	ELECT 100MF 20% 16V		C506	1-123-318-00	ELECT 33MF 20% 16V	
C129	1-123-324-00	ELECT 1000MF 20% 16V		C508	1-102-112-00	CERAMIC 330PF 10% 50V	
C130	1-123-356-00	ELECT 10MF 20% 16V		C509	1-102-030-00	CERAMIC 330PF 10% 500V	
C217	1-123-321-00	ELECT 220MF 20% 16V		C510	1-123-369-00	ELECT 4.7MF 20% 50V	
C231	1-123-380-00	ELECT 1MF 20% 50V					
C241	1-123-332-00	ELECT 47MF 20% 16V		C511	1-161-267-00	CERAMIC 47PF 5% 50V	
C249	1-162-288-31	CERAMIC 330PF 10% 50V		C515	1-102-212-00	CERAMIC 820PF 10% 500V	
C250	1-123-369-00	ELECT 4.7MF 20% 50V		C518	1-123-384-00	ELECT 10MF 20% 100V	
C251	1-162-117-00	CERAMIC 100PF 10% 500V		C519	1-123-024-00	ELECT 33MF 10% 160V	
C252	1-123-383-00	ELECT 4.7MF 20% 100V		C520	<b>A</b> 1-162-115-51	CERAMIC 330PF 10% 2KV	
C254	1-123-933-00	ELECT 10MF 20% 160V					
C256	1-123-318-00	ELECT 33MF 20% 16V		C521	1-106-198-00	MYLAR 0.012MF 10% 100V	
C257	1-102-121-00	CERAMIC 0.0022MF 10% 50V		C522	<b>A</b> 1-136-063-11	FILM 0.0055MF 3% 1.4KV	
C258	1-106-176-00	MYLAR 0.0015MF 10% 50V		C523	1-123-930-00	ELECT 2.2MF 20% 160V	
C302	1-123-332-00	ELECT 47MF 20% 16V		C524	1-123-356-00	ELECT 10MF 20% 16V	
C303	1-123-321-00	ELECT 220MF 20% 16V		C525	1-123-356-00	ELECT 10MF 20% 50V	
C304	1-123-330-00	ELECT 22MF 20% 16V					
C305	1-123-381-00	ELECT 2.2MF 20% 50V		C527	1-136-173-00	FILM 0.47MF 5% 50V	
				C528	1-136-136-00	FILM 0.24MF 5% 200V	
				C529	1-102-223-00	CERAMIC 0.0047MF 10% 2KV	
				C530	1-123-346-00	ELECT 220MF 20% 35V	
				C541	1-102-030-00	CERAMIC 330PF 10% 500V	
				C542	1-108-835-00	MYLAR 0.0068MF 10% 50V	
				C543	1-123-345-00	ELECT 100MF 20% 35V	
				C544	1-123-322-00	ELECT 330MF 20% 16V	
				C545	1-123-322-00	ELECT 330MF 20% 16V	
				C546	1-123-332-00	ELECT 47MF 20% 16V	
				C551	1-102-212-00	CERAMIC 820PF 10% 500V	
				C552	1-123-335-00	ELECT 330MF 20% 25V	
				C555	1-102-978-00	CERAMIC 220PF 5% 50V	

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C557	1-101-810-00	CERAMIC 100PF	5%	500V	L201	1-408-441-31	MICRO INDUCTOR 8.2UH
C558	1-123-380-00	ELECT 1MF	20%	50V	L301	1-408-415-00	MICRO INDUCTOR 33UH
C560	1-101-880-00	CERAMIC 47PF	5%	50V	L401	1-408-441-31	MICRO INDUCTOR 8.2UH
C601	1-130-682-51	FILM 0.22MF	20%	125V	L501	1-407-365-00	COIL, CHOKE
C602	1-124-959-11	ELECT 330MF	20%	200V	L503	1-407-699-00	MICRO INDUCTOR 33UH
C603	1-123-933-00	ELECT 10MF	20%	160V	L504	1-407-695-00	MICRO INDUCTOR 15UH
<u>DIODE</u>				L601	1-408-225-00	MICRO INDUCTOR 3.3UH	
D001	8-719-815-55	DIODE 1S1555		L602	1-408-225-00	MICRO INDUCTOR 3.3UH	
D003	8-719-101-38	DIODE RD3.6E-L1		<u>TRANSISTOR</u>			
D103	8-719-101-04	DIODE RD33E-B2		Q001	8-729-117-54	TRANSISTOR 2SA1175	
D206	8-719-815-55	DIODE 1S1555		Q002	8-729-117-54	TRANSISTOR 2SA1175	
D241	8-719-102-90	DIODE RD10E-N2		Q003	8-729-178-54	TRANSISTOR 2SC2785	
D251	8-719-911-19	DIODE 1SS119		Q004	8-729-117-54	TRANSISTOR 2SA1175	
D301	8-719-200-02	DIODE 10E2		Q005	8-729-178-54	TRANSISTOR 2SC2785	
D302	8-719-102-71	DIODE RD5.6E-N2		Q104	8-729-178-54	TRANSISTOR 2SC2785	
D401	8-719-901-04	DIODE SI801-04		Q105	8-729-178-54	TRANSISTOR 2SC2785	
D402	8-719-815-55	DIODE 1S1555		Q205	8-729-117-54	TRANSISTOR 2SA1175	
D403	8-719-815-55	DIODE 1S1555		Q206	8-729-117-54	TRANSISTOR 2SA1175	
D501	8-719-911-55	DIODE U05G		Q208	8-729-117-54	TRANSISTOR 2SA1175	
D502	8-719-100-35	DIODE RD5.6E-B2		Q241	8-729-288-03	TRANSISTOR 2SD880	
D503	8-719-102-72	DIODE RD5.6E-N3		Q250	8-729-238-32	TRANSISTOR 2SC2383	
D504	8-719-911-55	DIODE U05G		Q251	8-729-201-32	TRANSISTOR 2SA1013	
D508	8-719-901-93	DIODE V19E		Q252	8-729-238-32	TRANSISTOR 2SC2383	
D511	8-719-924-06	DIODE ERC24-06S		Q401	8-729-178-54	TRANSISTOR 2SC2785	
D512	1-8-719-901-94	DIODE V19CS		Q402	8-729-178-54	TRANSISTOR 2SC2785	
D513	8-719-300-65	DIODE ES1F		Q403	8-729-117-54	TRANSISTOR 2SA1175	
D514	1-8-719-901-93	DIODE V19E		Q404	8-729-178-54	TRANSISTOR 2SC2785	
D601	1-8-719-801-71	DIODE TVR4J-TPA2		Q405	8-729-117-54	TRANSISTOR 2SA1175	
D602	8-719-801-71	DIODE TVR4J-TPA2		Q406	8-729-178-54	TRANSISTOR 2SC2785	
D603	8-719-801-71	DIODE TVR4J-TPA2		Q407	8-729-117-54	TRANSISTOR 2SA1175	
D604	8-719-801-71	DIODE TVR4J-TPA2		Q408	8-729-178-54	TRANSISTOR 2SC2785	
<u>FUSE</u>				Q409	8-729-178-54	TRANSISTOR 2SC2785	
F601	1-532-509-11	FUSE, GLASS TUBE 6.3A/125V		Q411	8-729-178-54	TRANSISTOR 2SC2785	
	1-533-127-00	FUSE CLIP; F601		Q412	8-729-178-54	TRANSISTOR 2SC2785	
F602	1-532-536-11	FUSE, GLASS-TUBE 1A/125V		Q501	8-729-168-82	TRANSISTOR 2SC2688	
	*1-533-146-00	HOLDER, FUSE; F602		Q502	8-729-802-50	TRANSISTOR 2SD1649-CA	
				Q503	8-729-177-43	TRANSISTOR 2SD774	
<u>IC</u>				<u>RESISTOR</u>			
IC001	8-759-922-85	IC MB8844-1436K		R001	1-247-833-00	CARBON 1.2K 5% 1/6W	
IC301	8-752-019-20	IC CX20192		R002	1-247-833-00	CARBON 1.2K 5% 1/6W	
IC401	8-719-800-43	DIODE TLP551		R004	1-249-429-11	CARBON 10K 5% 1/6W	
IC402	8-719-936-96	PC817-B		R005	1-249-437-11	CARBON 47K 5% 1/6W	
IC501	8-759-801-98	IC LA7830		R006	1-247-885-00	CARBON 180K 5% 1/6W	
IC601	1-8-749-901-35	IC STR30135		R007	1-249-429-11	CARBON 10K 5% 1/6W	
<u>COIL</u>				R008	1-247-823-00	CARBON 470 5% 1/6W	
JW113	1-408-415-00	MICRO INDUCTOR 33UH		R009	1-249-425-11	CARBON 4.7K 5% 1/6W	
L001	1-407-494-00	MICRO INDUCTOR 1.5MMH		R010	1-249-425-11	CARBON 4.7K 5% 1/6W	
L002	1-408-438-11	MICRO INDUCTOR 4.7UH		R011	1-249-425-11	CARBON 4.7K 5% 1/6W	
L003	1-408-877-00	MICRO INDUCTOR 0.22UH		R012	1-249-425-11	CARBON 4.7K 5% 1/6W	
L103	1-408-452-31	MICRO INDUCTOR 68UH		R013	1-249-425-11	CARBON 4.7K 5% 1/6W	
				R014	1-249-425-11	CARBON 4.7K 5% 1/6W	

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R017	1-249-429-11	CARBON	10K 5% 1/6W	R222	1-247-819-00	CARBON	330 5% 1/6W
R018	1-249-429-11	CARBON	10K 5% 1/6W	R223	1-249-440-11	CARBON	82K 5% 1/6W
R020	1-249-421-11	CARBON	2.2K 5% 1/6W	R224	1-247-891-00	CARBON	330K 5% 1/6W
R021	1-247-817-00	CARBON	270 5% 1/6W	R226	1-249-429-11	CARBON	10K 5% 1/6W
R022	1-247-817-00	CARBON	270 5% 1/6W	R228	1-247-700-11	CARBON	100 5% 1/4W
R023	1-247-817-00	CARBON	270 5% 1/6W	R241	1-215-881-11	METAL OXIDE	15 5% 2W F
R024	1-247-817-00	CARBON	270 5% 1/6W	R242	1-246-463-00	CARBON	390 5% 1/4W
R025	1-249-429-11	CARBON	10K 5% 1/6W	R250	1-247-837-00	CARBON	1.8K 5% 1/6W
R026	1-247-817-00	CARBON	270 5% 1/6W	R251	1-247-831-00	CARBON	1K 5% 1/6W
R027	1-247-705-11	CARBON	270 5% 1/4W	R251	1-249-441-11	CARBON	100K 5% 1/6W
R028	1-247-817-00	CARBON	270 5% 1/6W	R252	1-247-881-00	CARBON	120K 5% 1/6W
R031	1-249-421-11	CARBON	2.2K 5% 1/6W	R253	1-247-280-00	CARBON	47K 5% 1/2W
R032	1-249-421-11	CARBON	2.2K 5% 1/6W	R254	1-247-817-00	CARBON	270 5% 1/6W
R033	1-247-717-11	CARBON	2.2K 5% 1/4W	R255	1-247-699-11	CARBON	82 5% 1/4W F
R034	1-247-717-11	CARBON	2.2K 5% 1/4W	R256	1-249-441-11	CARBON	100K 5% 1/6W
R035	1-249-421-11	CARBON	2.2K 5% 1/6W	R261	1-202-359-11	SOLID	100 5% 1/4W
R036	1-249-421-11	CARBON	2.2K 5% 1/6W	R301	1-214-769-00	METAL	47K 1% 1/4W
R037	1-249-421-11	CARBON	2.2K 5% 1/6W	R303	1-247-712-11	CARBON	820 5% 1/4W
R038	1-249-421-11	CARBON	2.2K 5% 1/6W	R304	1-247-706-11	CARBON	330 5% 1/4W
R039	1-249-425-11	CARBON	4.7K 5% 1/6W	R305	1-247-819-00	CARBON	330 5% 1/6W
R040	1-247-845-00	CARBON	3.9K 5% 1/6W	R306	1-247-819-00	CARBON	330 5% 1/6W
R041	1-247-845-00	CARBON	3.9K 5% 1/6W	R307	1-246-517-00	CARBON	68K 5% 1/4W
R043	1-249-433-11	CARBON	22K 5% 1/6W	R308	1-246-507-00	CARBON	27K 5% 1/4W
R044	1-249-433-11	CARBON	22K 5% 1/6W	R310	1-247-171-00	CARBON	47K 5% 1/4W
R045	1-247-135-00	CARBON	1.5K 5% 1/4W	R311	1-247-831-00	CARBON	1K 5% 1/6W
R046	1-249-419-11	CARBON	1.5K 5% 1/6W	R313	1-247-821-00	CARBON	390 5% 1/6W
R047	1-249-419-11	CARBON	1.5K 5% 1/6W	R314	1-247-873-00	CARBON	56K 5% 1/6W
R048	1-249-419-11	CARBON	1.5K 5% 1/6W	R315	1-247-859-00	CARBON	15K 5% 1/6W
R049	1-249-419-11	CARBON	1.5K 5% 1/6W	R316	1-249-435-11	CARBON	33K 5% 1/6W
R050	1-249-419-11	CARBON	1.5K 5% 1/6W	R317	1-249-432-11	CARBON	18K 5% 1/6W
R053	1-249-429-11	CARBON	10K 5% 1/6W	R401	1-247-107-00	CARBON	100 5% 1/4W F
R054	1-247-831-00	CARBON	1K 5% 1/6W	R402	1-247-698-11	CARBON	68 5% 1/4W F
R055	1-247-831-00	CARBON	1K 5% 1/6W	R404	1-249-441-11	CARBON	100K 5% 1/6W
R056	1-247-831-00	CARBON	1K 5% 1/6W	R405	1-247-805-00	CARBON	82 5% 1/6W
R057	1-247-815-00	CARBON	220 5% 1/6W	R406	1-247-833-00	CARBON	1.2K 5% 1/6W
R058	1-249-421-11	CARBON	2.2K 5% 1/6W	R407	1-249-405-11	CARBON	100 5% 1/6W
R063	1-247-713-11	CARBON	1K 5% 1/4W	R408	1-247-859-00	CARBON	15K 5% 1/6W
R064	1-247-823-00	CARBON	470 5% 1/6W	R409	1-247-851-00	CARBON	6.8K 5% 1/6W
R129	1-249-437-11	CARBON	47K 5% 1/6W	R410	1-249-405-11	CARBON	100 5% 1/6W
R130	1-249-437-11	CARBON	47K 5% 1/6W	R415	1-247-831-00	CARBON	1K 5% 1/6W
R131	1-249-437-11	CARBON	47K 5% 1/6W	R416	1-247-885-00	CARBON	180K 5% 1/6W
R132	1-247-167-00	CARBON	33K 5% 1/4W	R417	1-247-885-00	CARBON	180K 5% 1/6W
R133	1-247-171-00	CARBON	47K 5% 1/4W	R418	1-247-831-00	CARBON	1K 5% 1/6W
R134	1-249-429-11	CARBON	10K 5% 1/6W	R420	1-247-859-00	CARBON	15K 5% 1/6W
R146	1-247-725-11	CARBON	10K 5% 1/4W	R421	1-249-405-11	CARBON	100 5% 1/6W
R153	1-215-898-11	METAL OXIDE	10K 5% 2W F	R422	1-247-833-00	CARBON	1.2K 5% 1/6W
R154	1-247-149-00	CARBON	5.6K 5% 1/4W	R423	1-249-405-11	CARBON	100 5% 1/6W
R161	1-249-459-11	CARBON	12K 5% 1/4W	R425	1-247-815-00	CARBON	220 5% 1/6W
R162	1-247-831-00	CARBON	1K 5% 1/6W	R426	1-249-429-11	CARBON	10K 5% 1/6W
R164	1-247-713-11	CARBON	1K 5% 1/4W	R427	1-249-441-11	CARBON	100K 5% 1/6W
R205	1-249-435-11	CARBON	33K 5% 1/6W	R428	1-249-433-11	CARBON	22K 5% 1/6W
R208	1-249-435-11	CARBON	33K 5% 1/6W	R429	1-249-429-11	CARBON	10K 5% 1/6W
R221	1-247-831-00	CARBON	1K 5% 1/6W	R430	1-247-831-00	CARBON	1K 5% 1/6W

A

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R431	1-249-421-11	CARBON	2.2K 5% 1/6W	R552	1-216-379-11	METAL OXIDE	6.8 5% 2W F
R432	1-247-831-00	CARBON	1K 5% 1/6W	R601	△ 1-202-719-51	SOLID	1M 10% 1/2W
R433	1-247-887-00	CARBON	220K 5% 1/6W	R602	△ 1-205-707-12	CEMENTED	2.2 10W
R434	1-247-827-00	CARBON	680 5% 1/6W	R603	△ 1-216-373-51	METAL OXIDE	2.2 5% 2W F
R435	1-202-730-00	SOLID	8.2M 10% 1/2W	R604	1-215-899-11	METAL OXIDE	15K 5% 2W F
R436	1-247-843-00	CARBON	3.3K 5% 1/6W	R605	1-247-895-00	CARBON	470K 5% 1/6W
R437	1-249-429-11	CARBON	10K 5% 1/6W	R606	△ 1-205-700-11	CEMENTED	200 5% 20W
R438	1-247-831-00	CARBON	1K 5% 1/6W	R607	△ 1-249-401-51	CARBON	47 5% 1/6W F
R439	1-249-429-11	CARBON	10K 5% 1/6W	VARIABLE RESISTOR			
R440	1-247-831-00	CARBON	1K 5% 1/6W	RV001	1-230-794-11	RES, VAR, SLIDE	10K
R441	1-249-421-11	CARBON	2.2K 5% 1/6W	RV301	1-230-781-11	RES, VAR, CARBON	20KX4
R445	1-247-713-11	CARBON	1K 5% 1/4W	RV302	1-230-781-11	RES, VAR, CARBON	20KX4
R448	1-247-717-11	CARBON	2.2K 5% 1/4W	RV303	1-230-781-11	RES, VAR, CARBON	20KX4
R451	1-202-727-00	SOLID	4.7M 10% 1/2W	RV304	1-230-781-11	RES, VAR, CARBON	20KX4
R501	1-214-788-00	METAL	300K 1% 1/4W	RV305	1-230-632-11	RES, ADJ, CARBON	33K
R502	1-216-460-11	METAL OXIDE	3.9K 5% 2W F	RV306	1-230-629-41	RES, ADJ, CARBON	3.3K
R503	1-216-460-11	METAL OXIDE	3.9K 5% 2W F	RV401	1-230-630-11	RES, ADJ, CARBON	10K
R505	1-249-459-11	CARBON	12K 5% 1/4W F	RV402	1-230-627-11	RES, ADJ, CARBON	1K
R506	1-247-721-11	CARBON	4.7K 5% 1/4W	RV501	1-228-728-00	RES, ADJ, CERAMIC CARBON	100K
R507	1-247-843-00	CARBON	3.3K 5% 1/6W	RV502	1-230-633-41	RES, ADJ, CARBON	47K
R508	1-247-700-11	CARBON	100 5% 1/4W	RV503	1-230-629-41	RES, ADJ, CARBON	3.3K
R510	1-247-151-00	CARBON	6.8K 5% 1/4W	RV504	1-230-630-11	RES, ADJ, CARBON	10K
R511	1-247-843-00	CARBON	3.3K 5% 1/6W	SWITCH			
R512	1-247-831-00	CARBON	1K 5% 1/6W	S001	1-554-804-11	SWITCH, PUSH (1 KEY)	
R513	1-249-460-11	CARBON	15K 5% 1/4W	S002	1-554-804-11	SWITCH, PUSH (1 KEY)	
R515	1-249-460-11	CARBON	15K 5% 1/4W	S003	1-554-804-11	SWITCH, PUSH (1 KEY)	
R516	1-216-434-11	METAL OXIDE	1.8K 5% 1W F	S004	1-554-804-11	SWITCH, PUSH (1 KEY)	
R517	1-215-892-11	METAL OXIDE	1K 5% 2W F	S005	1-554-804-11	SWITCH, PUSH (1 KEY)	
R518	△ 1-213-146-61	METAL OXIDE	1.8K 5% 1W F	S006	1-554-804-11	SWITCH, PUSH (1 KEY)	
R519	1-247-706-11	CARBON	330 5% 1/4W	S007	1-554-804-11	SWITCH, PUSH (1 KEY)	
R520	△ 1-249-447-51	CARBON	1 5% 1/4W F	S008	1-554-804-11	SWITCH, PUSH (1 KEY)	
R521	△ 1-249-383-51	CARBON	1.5 5% 1/6W F	S009	1-554-804-11	SWITCH, PUSH (1 KEY)	
R522	1-215-854-51	METAL	15K 1% 1/4W	S010	1-554-804-11	SWITCH, PUSH (1 KEY)	
R523	△ 1-214-747-00	METAL	5.6K 1% 1/4W	S013	1-554-804-11	SWITCH, PUSH (1 KEY)	
■ R524	△	CARBON	1/4W	S014	1-554-824-11	SWITCH, PUSH (1 KEY)	
R525	△ 1-216-460-51	METAL OXIDE	3.9K 5% 2W F	S113	1-570-240-11	SWITCH, ROTARY	
R526	1-246-525-00	CARBON	150K 5% 1/4W	S113	1-570-240-11	SWITCH, ROTARY	
R527	1-214-915-00	METAL	120K 1% 1/2W	S501	1-554-186-00	SWITCH, LEVER	
R528	1-247-149-00	CARBON	5.6K 5% 1/4W	S601	△ 1-570-224-11	SWITCH, PUSH (AC POWER)(1 KEY)	
R529	1-249-423-11	CARBON	3.3K 5% 1/6W F	TRANSFORMER			
R530	1-247-823-00	CARBON	470 5% 1/6W	T251	△ 1-427-530-12	TRANSFORMER, OUTPUT	
R533	△ 1-249-383-51	CARBON	1.5 5% 1/6W F	T401	1-421-749-11	TRANSFORMER, INSULATING	
R534	1-244-919-00	CARBON	82K 5% 1/2W	T501	1-437-090-00	HDT	
R535	1-247-713-11	CARBON	1K 5% 1/4W	T503	△ 1-439-314-21	TRANSFORMER ASSY, FLYBACK	
R536	1-249-429-11	CARBON	10K 5% 1/6W	T601	△ 1-421-357-31	TRANSFORMER, LINE FILTER	
R537	1-215-862-11	METAL OXIDE	68 5% 1W F	THERMISTOR			
R538	1-247-831-00	CARBON	1K 5% 1/6W	TH301	1-800-945-00	THERMISTOR S-10K	
R539	1-249-425-11	CARBON	4.7K 5% 1/6W	THP601	△ 1-800-686-51	THERMISTOR (POSITIVE)	
R541	1-247-805-00	CARBON	82 5% 1/6W				
R542	1-247-817-00	CARBON	270 5% 1/6W				
R543	1-216-349-00	METAL OXIDE	1 5% 1W F				
R544	1-247-133-00	CARBON	1.2K 5% 1/4W				
R545	1-247-845-00	CARBON	3.9K 5% 1/6W				

- The components identified by ■ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

A	C	H	K
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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
<u>TUNER</u>							
TU101	1-463-603-11	TUNER, ET (BTP-201)		R717	1-202-824-00	SOLID 3.3K 1/2W	
<u>IF BLOCK</u>				R718	1-215-899-11	METAL OXIDE 15K 5% 2W F	
VIF201	1-464-478-11	IF BLOCK (IFB-450)		R719	1-202-842-51	SOLID 220K 1/2W	
<u>CRYSTAL</u>				R720	1-202-719-00	SOLID 1M 10% 1/2W	
X301	1-527-396-00	CRYSTAL, OSC		R721	1-216-348-00	METAL OXIDE 0.82 5% 1W F	
*****				R722	1-202-848-00	SOLID 680K 1/2W	
*A-1330-601-A C BOARD, COMPLETE				R723	1-202-838-00	SOLID 100K 1/2W	
*****				<u>VARIABLE RESISTOR</u>			
1-526-819-11 SOCKET, CRT				RV701	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
<u>CONNECTOR</u>				RV702	1-228-722-00	RES, ADJ, CERAMIC CARBON 3.3K	
C1	*1-506-371-00	2P PLUG (L)		RV703	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
C2	*1-508-786-00	2P PLUG (M)		RV704	1-228-722-00	RES, ADJ, CERAMIC CARBON 3.3K	
C3	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P		RV705	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
C4	*1-508-765-00	3P PLUG (M)		RV706	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
<u>CAPACITOR</u>				RV707	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
C705	1-162-116-00	CERAMIC 680PF 10% 2KV		RV708	1-230-798-11	RES, ADJ, METAL GLAZE 90M	
C706	1-129-714-00	FILM 0.01MF 10% 630V		RV709	1-228-725-00	RES, ADJ, CERAMIC CARBON 22K	
<u>COIL</u>				*****			
L701	1-408-420-00	MICRO INDUCTOR 82UH		*1-614-811-11	H BOARD	*****	
L702	1-408-420-00	MICRO INDUCTOR 82UH		<u>DIODE</u>			
L703	1-408-420-00	MICRO INDUCTOR 82UH		D002	8-719-907-50	DIODE GL-7N202	
L704	1-408-424-00	MICRO INDUCTOR 180UH		D004	8-719-812-44	DIODE TL Y124	
<u>TRANSISTOR</u>				<u>CONNECTOR</u>			
Q701	8-729-326-11	TRANSISTOR 2SC2611		H1	*1-564-457-11	PLUG, CONNECTOR (2.5MM) 9P	
Q702	8-729-326-11	TRANSISTOR 2SC2611		H2	*1-564-453-11	PLUG, CONNECTOR (2.5MM) 5P	
Q703	8-729-326-11	TRANSISTOR 2SC2611		<u>SWITCH</u>			
<u>RESISTOR</u>				S011	1-554-303-21	SWITCH, KEY BOARD	
R701	1-249-421-11	CARBON 2.2K 5% 1/6W		S012	1-554-303-21	SWITCH, KEY BOARD	
R703	1-247-821-00	CARBON 390 5% 1/6W		*****			
R704	1-247-841-00	CARBON 2.7K 5% 1/6W		*1-618-953-11	K BOARD	*****	
R705	1-202-824-00	SOLID 3.3K 1/2W		1-941-173-14 CONNECTOR ASSY, TRANSLATION 3P			
R706	1-215-899-11	METAL OXIDE 15K 5% 2W F		<u>JACK</u>			
R707	1-247-833-00	CARBON 1.2K 5% 1/6W		EJ901	1-507-756-00	JACK (SMALL TYPE)	
R708	1-247-823-00	CARBON 470 5% 1/6W					
R709	1-247-827-00	CARBON 680 5% 1/6W					
R710	1-247-841-00	CARBON 2.7K 5% 1/6W					
R711	1-202-824-00	SOLID 3.3K 1/2W					
R712	1-215-899-11	METAL OXIDE 15K 5% 2W F					
R713	1-247-833-00	CARBON 1.2K 5% 1/6W					
R714	1-247-823-00	CARBON 470 5% 1/6W					
R715	1-247-827-00	CARBON 680 5% 1/6W					
R716	1-247-841-00	CARBON 2.7K 5% 1/6W					

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# SONY

## TRINITRON® COLOR TV

### KV-1365

**US Model**

Chassis No. SCC-548X-A

**Canadian Model**

Chassis No. SCC-552M-A

#### WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

#### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

#### ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

#### ATTENTION AU COMPOSANT AYANT RAPPORT A LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UN TRAMÉ ET UNE MARQUE  $\Delta$  SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES EXPLOSÉES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DU CIRCUIT QUI SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT SONT IDENTIFIÉS DANS CE MANUEL. SUIVRE LES PROCÉDURES QUAND LES COMPOSANTS CRITIQUES SONT REMPLACÉS OU LE FONCTIONNEMENT IMPROPRE EST SUSPECTÉ.

Note: The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

#### Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms,  $\frac{1}{2}$  W unless otherwise noted. K: 1000  $\Omega$ , M: 1000 k $\Omega$ .
- $\square$ : nonflammable resistor.
- $\Delta$ : internal component.
- $\square$ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by  $\square$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by  $\square$ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by  $\square$  and repeat the adjustment until the specified value is achieved. (Refer to R524 adjustment on page 15.)
- When replacing the part in below table, be sure to perform the related adjustment.

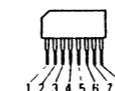
Part replaced ( $\square$ )	Adjustment ( $\square$ )
C307, C524, D502, D512, IC301, R521, R522, R523, R524, R530, R534, T503	R524 adjustment

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M $\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- : B + bus.
- : B - bus.
- Voltage variations may be noted due to normal production tolerances.
- $\square$ : adjustment for repair.
- $\times$ : Can not be measured.

BX-1357



CX20061



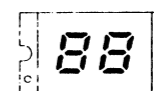
2SA933S  
2SC1740S



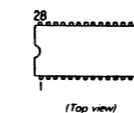
2SD774



GL-7N202



CX20192  
CX525-1374K



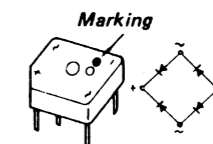
2SC1826  
2SD1406  
2SD313HP  
2SD880



10E2  
ES1F  
GP08D  
RGP01-17  
RGP10G



S3WB80Z



LA7830



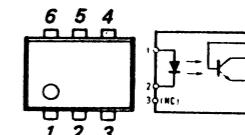
2SC2230A  
2SC2610BK  
2SD789



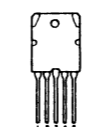
1S1555  
EQA02-06B  
EQA02-12A5  
HZ12A3  
HZ23EB2  
HZ6A3  
HZ6BZ  
RD10EN2  
RD13EN1  
RD3.6EL1  
RD33EB2  
RD5.6E-N3  
RD5.6EBZ7S  
RD5.6EN2



TLP531



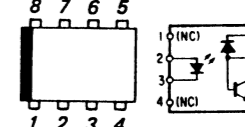
STR30135



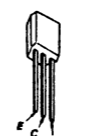
2SC2456  
2SC2611  
2SC2688



TLP551



2SA1048  
2SA1115  
2SC2458  
2SC2603



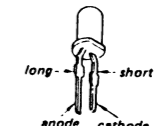
2SD1135



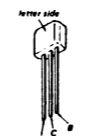
1SS119  
1SS133  
1SS148



TLY124



2SA1175  
2SC2785



2SD1649



SIB01-02  
SIB01-04



V06C  
V19C  
V19CS  
V19E

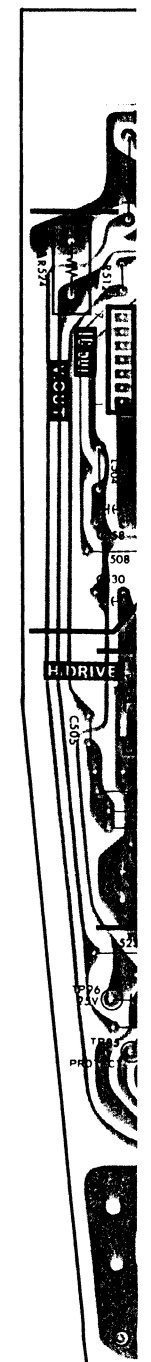


#### PRINTED WIR

Note: All mounting from conductor

A VIF, SIF, Y AMP, CU EXTERNA

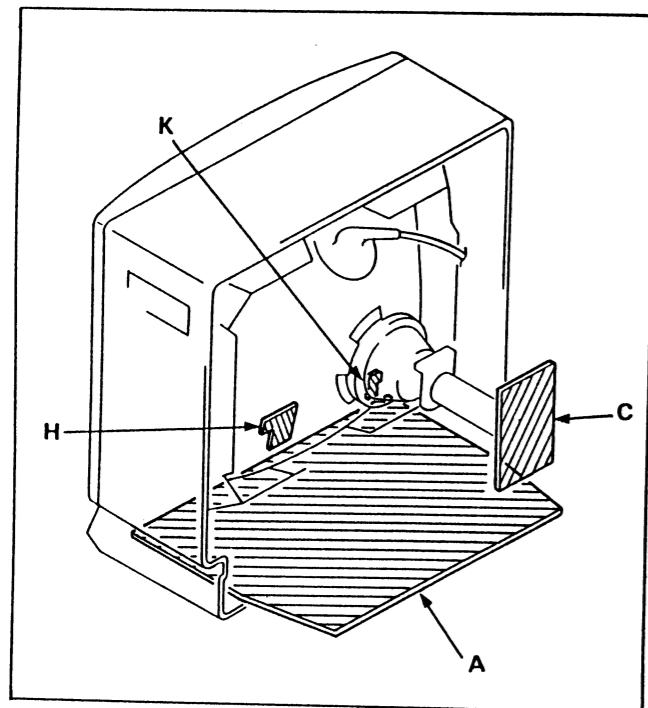
Q	IC 501
D	301
ADJ	
TP	96 85



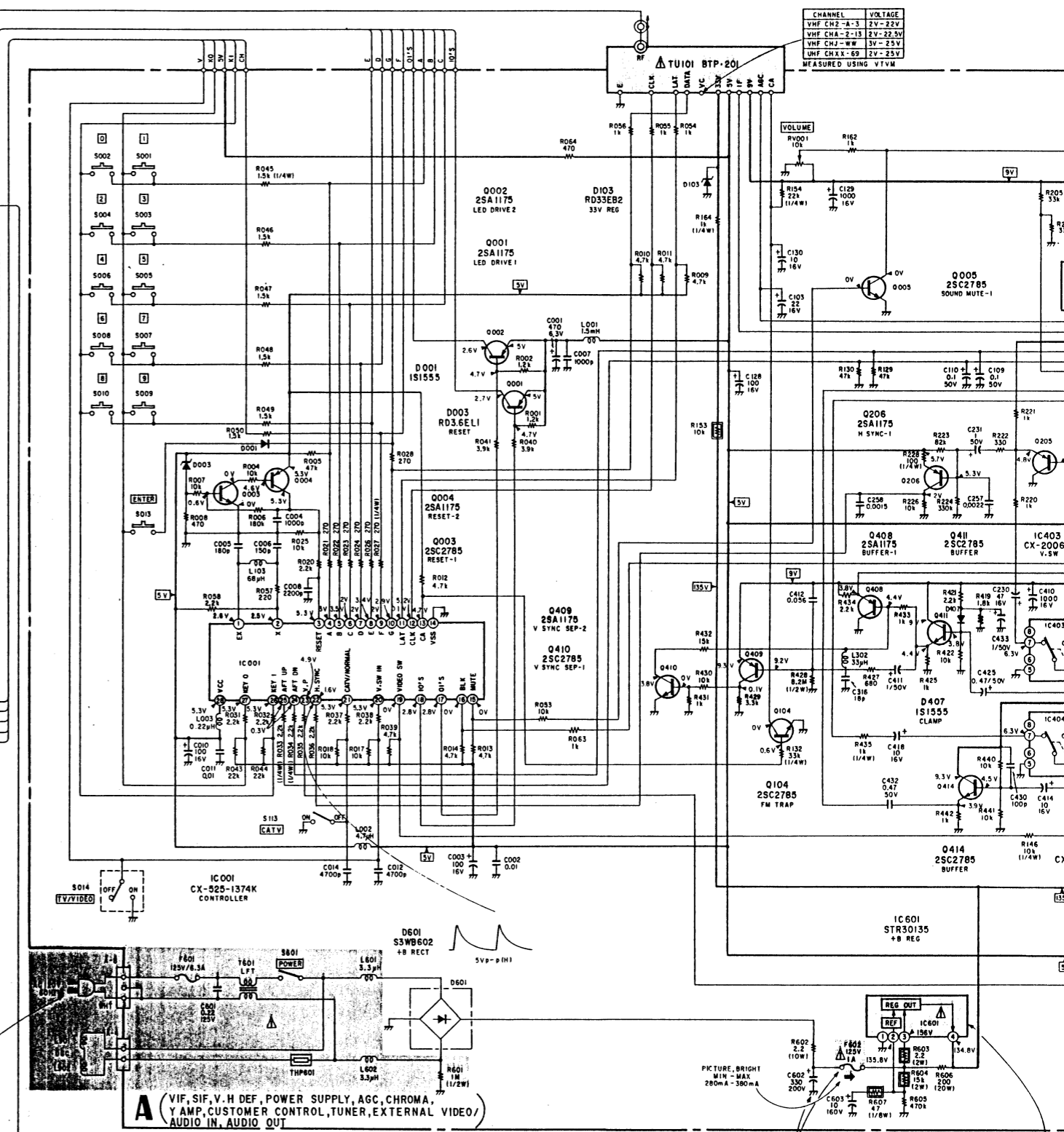
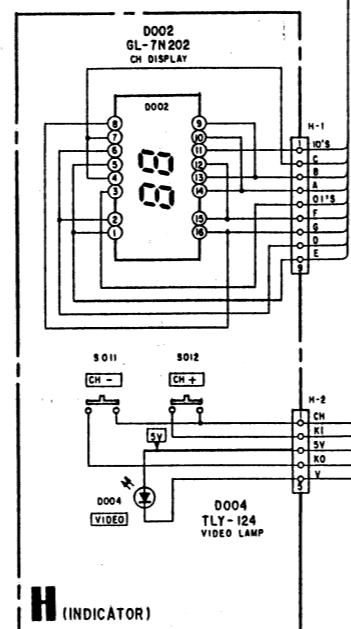
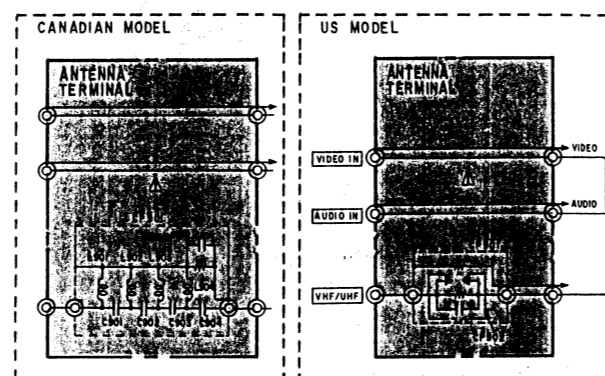
CIRCUIT BOARDS LOCATION

SCHEMATIC DIAGRAM

# CIRCUIT BOARDS LOCATION



# SCHEMATIC DIAGRAM



**CAUTION (US MODEL ONLY)**  
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

**CAUTION**  
When taking a broken fuse (F602) off, discharge across C602 to avoid shock hazard.

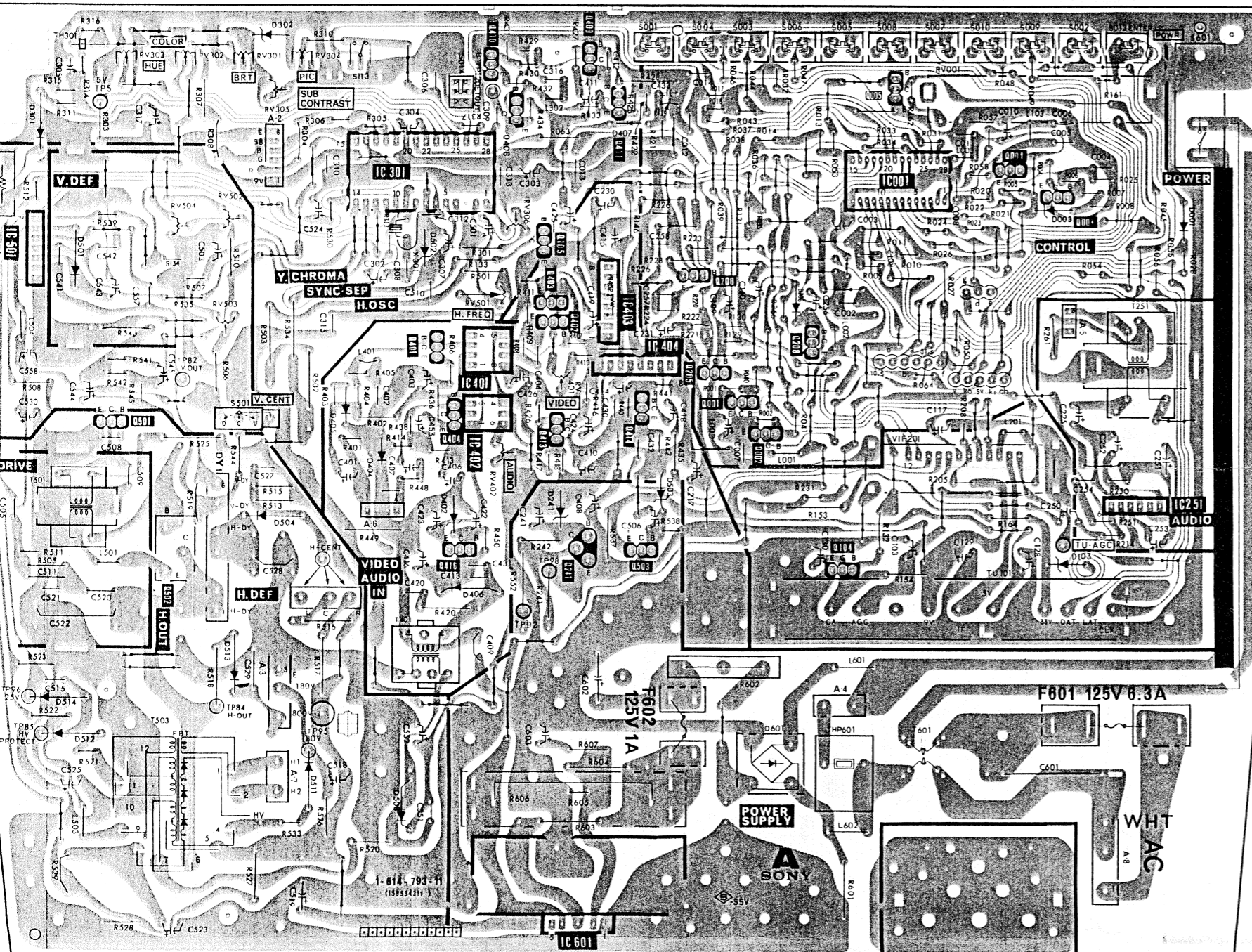
When value.

## WIRING BOARDS

Printing diagrams are viewed  
inductor side.

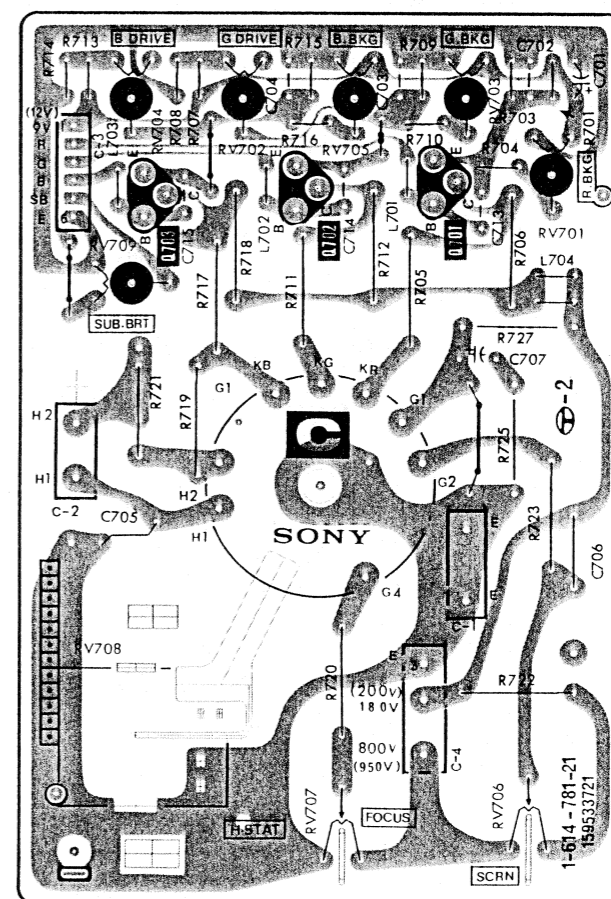
F, SIF, V.H DEF, POWER SUPPLY, AGC, CHROMA,  
AMP, CUSTOMER CONTROL, TUNER,  
INTERNAL VIDEO/AUDIO IN, AUDIO OUT

IC 501	501	502		IC 301	401 404 416	410 IC 401 IC 402	408 403 402 413	409 411 IC 403 241 IC 601	IC 404 414 503	206 205 001	002	208	104	005 IC 001	004	003	IC 251
301	501		302		502	402 406	241	503		206					003		001
514	512		513	504	511	405									103		
		RV 303	RV 302 RV 504	RV 301 RV 502 RV 503	RV 304 RV 305		RV 501	RV 306 RV 402	RV 401			601		RV 001			
85	5	82	84		95		12	92	98								



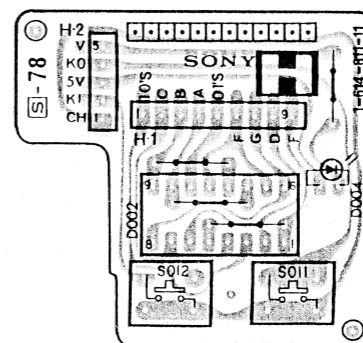
C

[RGB OUT]



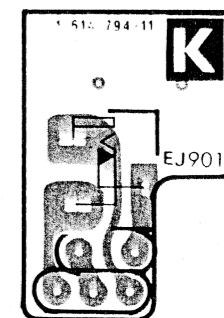
**H**

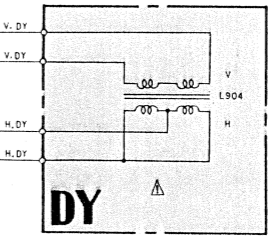
[INDICATOR]



**K**

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**☒:See Page 15.**